

# state of world population 2007

Unleashing the Potential of Urban Growth





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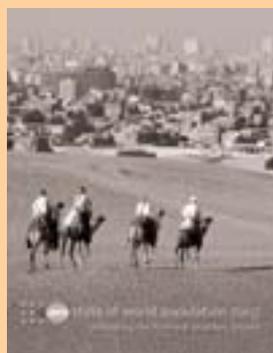
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On the cover  
Camel riders approach Cairo, Egypt, from across the desert.

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Background image:  
Employees of a huge industrial complex on their way to work in the town of Jamshedpur, India.

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# Introduction

## Peering into the Dawn of an Urban Millennium

In 2008, the world reaches an invisible but momentous milestone: For the first time in history, more than half its human population, 3.3 billion people, will be living in urban areas. By 2030, this is expected to swell to almost 5 billion. Many of the new urbanites will be poor. Their future, the future of cities in developing countries, the future of humanity itself, all depend very much on decisions made *now* in preparation for this growth.

While the world's urban population grew very rapidly (from 220 million to 2.8 billion) over the 20th century, the next few decades will see an unprecedented scale of urban growth in the developing world. This will be particularly notable in Africa and Asia where the urban population will double between 2000 and 2030: That is, the accumulated urban growth of these two regions during the whole span of history will be duplicated in a single generation. By 2030, the towns and cities of the developing world will make up 80 per cent of urban humanity.

Urbanization—the increase in the urban share of total population—is inevitable, but it can also be positive. The current concentration of poverty, slum growth and social disruption in cities does paint a threatening picture: Yet no country in the industrial age has ever achieved significant economic growth without urbanization. Cities concentrate poverty, but they also represent the best hope of escaping it.

Cities also embody the environmental damage done by modern civilization; yet experts and policymakers increasingly recognize the potential value of cities to long-term sustainability. If cities create environmental problems, they also contain the solutions. The potential benefits of urbanization far outweigh the disadvantages: The challenge is in learning how to exploit its possibilities.

In 1994, the Programme of Action of the International Conference on Population and Development called on governments to “respond to the need of all citizens, including urban squatters, for personal safety, basic infrastructure and services, to eliminate health and social problems . . .” More recently, the

◀ *The intensity of urbanization can clash with age-old customs and traditions. The traffic dodges a cow, while street vendors vie with modern shops in this busy Mumbai, India, intersection.*

© Martin Roemers/Panos Pictures



▲ An elderly man outside his home: a traditional hutong in Beijing, China. The white character on the wall indicates that the building is scheduled for demolition to make way for “urban development”.

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United Nations Millennium Declaration drew attention to the growing significance of urban poverty, specifying, in Target 11, the modest ambition of achieving by 2020 “a significant improvement in the lives of at least 100 million slum dwellers”.<sup>2</sup>

UN-Habitat’s Third World Urban Forum, as well as its *State of the World’s Cities 2006/7*, successfully focused world interest on the deteriorating social and environmental conditions of urban localities.<sup>3</sup> The process of globalization has also drawn attention to the productive potential of cities and to the human cost. Yet the enormous scale and impact of future urbanization have not penetrated the public’s mind.

So far, attention has centred mostly on immediate concerns, problems such as how to accommodate the poor and improve living conditions; how to generate employment; how to reduce cities’ ecological footprint; how to improve governance; and how to administer increasingly complex urban systems.

These are all obviously important questions, but they shrink in comparison with the problems raised by the impending future growth of the urban population. Up to now, policymakers and civil society organizations have reacted to challenges as they arise. This is no longer enough. A pre-emptive approach is needed if urbanization in developing countries is to help solve social and environmental problems, rather than make them catastrophically worse.

The present Report thus attempts to look beyond current problems, real, urgent and poignant though they are. Yet, it is also a call to action. The Report tries to grasp the implications of the imminent doubling of the developing world’s urban population and discusses what needs to be done to prepare for this massive increase. It looks more closely at the demographic processes underlying urban growth in developing areas and their policy implications. It specifically examines the consequences of the urban transition for poverty reduction and sustainability.

It surveys the differing conditions and needs of poor urban women and men, and the obstacles they face as they strive to claim their rights and realize their potential as productive members of the new urban world.

Although mega-cities have received most of the attention, conditions in smaller urban areas call for even greater consideration. Contrary to general belief, the bulk of urban population growth is likely to be in smaller cities and towns, whose capabilities for planning and implementation can be exceedingly weak. Yet the worldwide process of decentralizing governmental powers is heaping greater responsibility on them. As the population of smaller cities increases, their thin managerial and planning capacities come under mounting stress. New ways will have to be found to equip them to plan ahead for expansion, to use their resources sustainably and to deliver essential services.

One of the Report's key observations is that poor people will make up a large part of future urban growth. This simple fact has generally been overlooked, at great cost. Most urban growth now stems from natural increase (more births than deaths) rather than migration. But wherever it comes from, the growth of urban areas includes huge numbers of poor people. Ignoring this basic reality will make it impossible either to plan for inevitable and massive city growth or to use urban dynamics to help relieve poverty.

Once policymakers and civil society understand and accept the demographic and social composition of urban growth, some basic approaches and initiatives suggest themselves. These could have a huge impact on the fate of poor people and on the viability of the cities themselves. Throughout this Report the message is clear: Urban and national governments, together with civil society, and supported by international organizations, can take steps now that will make a huge difference for the social, economic and environmental living conditions of a majority of the world's population.

Three policy initiatives stand out in this connection. First, preparing for an urban future requires, at a minimum, respecting the rights of the poor to the city. As Chapter 3 shows, many policymakers continue to try to prevent urban growth by discouraging rural-urban migra-

tion, with tactics such as evicting squatters and denying them services. These attempts to prevent migration are futile, counter-productive and, above all, wrong, a violation of people's rights. If policymakers find urban growth rates too high, they have effective options which also respect human rights. Advances in social development, such as promoting gender equity and equality, making education universally available and meeting reproductive health needs, are important for their own sake. But they will also enable women to avoid unwanted fertility and reduce the main factor in the growth of urban populations—natural increase.

Secondly, cities need a longer-term and broader vision of the use of urban space to reduce poverty and promote sustainability. This includes an explicit concern with the land needs of the poor. For poor families, having an adequate piece of land—with access to water, sewage, power and transport—on which they can construct their homes and improve their lives is essential: Providing it requires a new and proactive approach. Planning for such spatial and infrastructure requirements, keeping in mind poor women's multiple roles and needs, will greatly improve the welfare of poor families. This kind of people-centred development knits together the social fabric and encourages economic growth that includes the poor.

Similarly, protecting the environment and managing ecosystem services in future urban expansion requires purposeful management of space in advance of needs. The "urban footprint" stretches far beyond city boundaries. Cities influence, and are affected by, broader environmental considerations. Proactive policies for sustainability will also be important in view of climate change and the considerable proportion of urban concentrations at or near sea level.

Thirdly, population institutions and specialists can and should play a key role in supporting community organizations, social movements, governments and the international community in improving the nature and form of future urban expansion, and thus enhancing its power to reduce poverty and promote environmental sustainability. A concerted international effort at this critical time is crucial to clarify policy options and provide information and analyses that will support strategies to improve our urban future.



## 1

# The Promise of Urban Growth

*Adegoke Taylor, a skinny, solemn thirty-two-year-old itinerant trader with anxious eyes, shares an eight-by-ten-foot room with three other young men, on an alley in Isale Eko several hundred feet from the Third Mainland Bridge. In 1999, Taylor came to Lagos from Ile-Oluji, a Yoruba town a hundred and thirty miles to the northeast. He had a degree in mining from a polytechnic school and the goal of establishing a professional career. Upon arriving in the city, he went to a club that played juju—pop music infused with Yoruba rhythms—and stayed out until two in the morning. “This experience alone makes me believe I have a new life living now,” he said, in English, the lingua franca of Lagos. “All the time, you see crowds everywhere. I was motivated by that. In the village, you’re not free at all, and whatever you’re going to do today you’ll do tomorrow.” Taylor soon found that none of the few mining positions being advertised in Lagos newspapers were open to him. “If you are not connected, it’s not easy, because there are many more applications than jobs,” he said. “The moment you don’t have a recognized person saying, ‘This is my boy, give him a job,’ it’s very hard. In this country, if you don’t belong to the elite”—he pronounced it “e-light”—“you will find things very, very hard.”*

*Taylor fell into a series of odd jobs: changing money, peddling stationery and hair plaits, and moving heavy loads in a warehouse for a daily wage of four hundred naira—about three dollars. Occasionally, he worked for West African traders who came to the markets near the port and needed middlemen to locate goods. At first, he stayed with the sister of a childhood friend in Mushin, then found cheap lodging there in a shared room for seven dollars a month, until the building was burned down during the ethnic riots. Taylor lost everything. He decided to move to Lagos Island, where he pays a higher rent, twenty dollars a month.*

*Taylor had tried to leave Africa but was turned down for a visa by the American and British Embassies. At times, he longed for the calm of his home town, but there was never any question of returning to Ile-Oluji, with its early nights and monotonous days and the prospect of a lifetime of manual labor. His future was in Lagos . . . .*

*“There’s no escape, except to make it,” Taylor said.’*

◀ A young woman smiles from her tent-like hut built right under the shade of the most luxurious hotel in Dhaka, Bangladesh.

© Shehzad Noorani/Still Pictures

## This Iceberg is Growing

“The growth of cities will be the single largest influence on development in the 21st century.” These were the opening words of UNFPA’s 1996 *State of World Population Report*.<sup>2</sup> This statement is proving more accurate by the day.

Until now humankind has lived and worked primarily in rural areas. But the world is about to leave its rural past behind: By 2008, for the first time, more than half of the globe’s population, 3.3 billion people, will be living in towns and cities.<sup>3</sup>

The number and proportion of urban dwellers will continue to rise quickly. Urban population will grow to 4.9 billion by 2030. In comparison, the world’s rural population is expected to *decrease* by some 28 million between 2005 and 2030. At the global level, *all* future population growth will thus be in towns and cities.

Most of this growth will be in developing countries. The urban population of Africa and Asia is expected to double between 2000 and 2030. It will also continue to expand, but more slowly, in Latin America and the Caribbean. Meanwhile, the urban population of the developed world is expected to grow relatively little: from 870 million to 1.01 billion.

This vast urban expansion in developing countries has global implications. Cities are already the locus of nearly all major economic, social, demographic and environmental transformations. What happens in the cities of the less developed world in coming years will shape prospects for global economic growth, poverty alleviation, population stabilization, environmental sustainability and, ultimately, the exercise of human rights.

Yet surprisingly little is being done to maximize the potential benefits of this transformation or to reduce its harmful consequences. The International Conference on Population and Development (ICPD) clearly recommended that: “Governments should strengthen their capacities to respond to the pressures caused by rapid urbanization by revising and reorienting the agencies and mechanisms for urban management as necessary and ensuring the wide participation of all population groups in planning and decision-making on local development.”<sup>4</sup>

This Report urges farsighted analysis and pre-emptive action to those purposes. The expected increases are too

### 1 SOME DEFINITIONS

- a) *Urban*. Settlements or localities defined as “urban” by national statistical agencies.
- b) *Urbanization*. The process of transition from a rural to a more urban society. Statistically, urbanization reflects an increasing proportion of the population living in settlements defined as urban, primarily through net rural to urban migration. The *level* of urbanization is the percentage of the total population living in towns and cities while the *rate* of urbanization is the rate at which it grows.
- c) *Urban growth*. The increase in the number of people who live in towns and cities, measured either in relative or absolute terms.
- d) *Natural increase*. The difference between the number of births and number of deaths in a given population.
- e) *The urban transition*. The passage from a predominantly rural to a predominantly urban society.

large, and the changes will happen too fast, to allow governments and planners simply to react.

An outstanding feature of urban population growth in the 21<sup>st</sup> century is that it will be composed, to a large extent, of *poor* people.<sup>5</sup> Poor people often fall through the cracks of urban planning; migrants are rejected or simply ignored in the vain hope of deterring further migration.

Realistic planning for future urban growth calls for explicit consideration of the needs of the poor. It also requires gender analysis: The particular needs and capabilities of poor women and girls are often unaccounted for and assumed to be the same as those of poor men and boys. And, as population structures change, attention to youth and the needs of the elderly will become ever more important.

The present chapter describes some of the main trends in the urban transformation, some of the obstacles and some of the possibilities, as a starting point for discussion of a new approach.

Box 1 offers some definitions. Defining the basic terms “urban” and “rural” in a universal way has always been problematic.<sup>6</sup> As globalization advances, the division of human settlements into “rural” and “urban” can also be

seen as increasingly artificial. Better transportation and communications bring cities, villages and farming areas ever closer. Rural areas come to look more like towns, while informality is transforming cities' housing, services and workforces, and even production and consumption. But since mindsets, planning efforts and data are still compartmentalized, the rural-urban distinction is still necessary, although imprecise.

Countries have their own definitions, and the speed of urban growth itself continually changes city boundaries. However, the deficiencies of these data are less significant when analysing broad trends and prospects of urban growth at the world and regional levels, as will be done in this Report.

### Urbanization's Second Wave: A Difference of Scale

Comparing future to past trends helps put current urban growth trends into perspective. The *scale* of current change is unprecedented—though *rates* of urban growth in most regions have slowed. The underlying socio-

economic and demographic factors behind the urban transition in developed and less developed countries also differ, as explained in Box 2.

The first urbanization wave took place in North America and Europe over two centuries, from 1750 to 1950: an increase from 10 to 52 per cent urban and from 15 to 423 million urbanites. In the second wave of urbanization, in the less developed regions, the number of urbanites will go from 309 million in 1950 to 3.9 billion in 2030. In those 80 years, these countries will change from 18 per cent to some 56 per cent urban.

At the beginning of the 20<sup>th</sup> century, the now developed regions had more than twice as many urban dwellers as the less developed (150 million to 70 million). Despite much lower levels of urbanization, the developing countries now have 2.6 times as many urban dwellers as the developed regions (2.3 billion to 0.9 billion). This gap will widen quickly in the next few decades.

At the world level, the 20<sup>th</sup> century saw an increase from 220 million urbanites in 1900 to 2.84 billion in 2000.<sup>7</sup> The present century will match this absolute

## 2 THE SECOND WAVE<sup>1</sup>

The huge increases in urban population in poorer countries are part of a "second wave" of demographic, economic and urban transitions, much bigger and much faster than the first. The first wave of modern transitions began in Europe and North America in the early 18th century. In the course of two centuries (1750-1950), these regions experienced the first demographic transition, the first industrialization and the first wave of urbanization. This produced the new urban industrial societies that now dominate the world. The process was comparatively gradual and involved a few hundred million people.

In the past half-century, the less developed regions have begun the same transition. Mortality has fallen rapidly and dramatically in most regions,

achieving in one or two decades what developed countries accomplished in one or two centuries, and the demographic impacts of these mortality changes have been drastically greater. Fertility declines are following—quite rapidly in East and South-East Asia and Latin America and more slowly in Africa.

In both waves, population growth has combined with economic changes to fuel the urban transition. Again, however, the speed and scale of urbanization today are far greater than in the past. This implies a variety of new problems for cities in poorer countries. They will need to build new urban infrastructure—houses, power, water, sanitation, roads, commercial and productive facilities—more rapidly than cities anywhere during the first wave of urbanization.

Two further conditions accentuate the second wave. In the past, overseas migrations relieved pressure on European cities. Many of those migrants, especially to the Americas, settled in new agricultural lands that fed the new cities. Restrictions on international migration today make it a minor factor in world urbanization.

Finally, the speed and size of the second wave are enhanced by improvements in medical and public health technology, which quickly reduce mortality and enable people to manage their own fertility. Developing and adapting forms of political, social and economic organization to meet the needs of the new urban world is a much greater challenge.

increase in about four decades. Developing regions as a whole will account for 93 per cent of this growth, Asia and Africa for over 80 per cent.

Between 2000 and 2030, Asia's urban population will increase from 1.36 billion to 2.64 billion, Africa's from 294 million to 742 million, and that of Latin America and the Caribbean from 394 million to 609 million. As a result of these shifts, developing countries will have 80 per cent of the world's urban population in 2030. By then, Africa and Asia will include almost seven out of every ten urban inhabitants in the world.

The impact of globalization on city growth patterns marks a critical difference between past and present transitions.<sup>8</sup> Cities are the main beneficiaries of globalization, the progressive integration of the world's economies. People follow jobs, which follow investment and economic activities. Most are increasingly concentrated in and around dynamic urban areas, large and small.

However, very few developing-country cities generate enough jobs to meet the demands of their growing populations. Moreover, the benefits of urbanization are not equally enjoyed by all segments of the population; left out are those who traditionally face social and

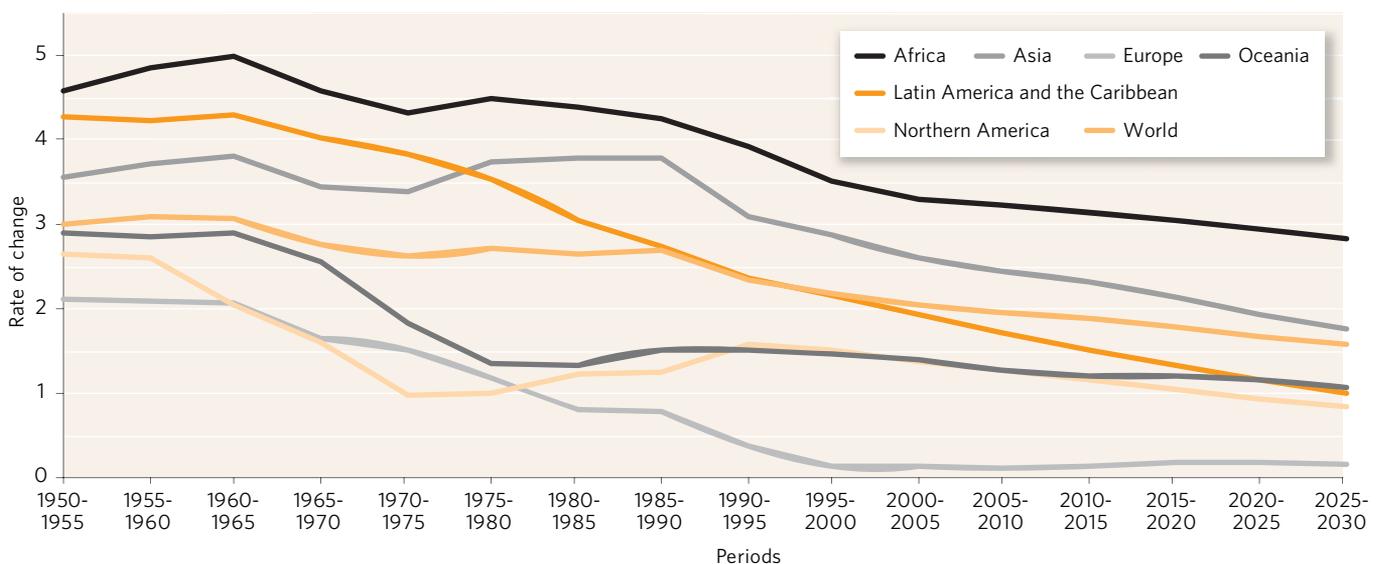
economic exclusion—women and ethnic minorities, for example. As Chapter 2 describes, the massive increase in numbers of urbanites, coupled with persistent underdevelopment and the shortage of urban jobs, are responsible for conditions that can outmatch the Dickensian squalor of the Industrial Revolution. Nevertheless, like Adegoke Taylor in the story presented at the beginning of this chapter, rural-urban migrants generally prefer their new life to the one they left behind.

### The Future of Urban Growth: Rates, Speed and Size<sup>9</sup>

Over the last 30 years, two patterns have gripped public and media attention: the speed of urban growth in less developed regions and the growth of mega-cities (those with 10 million or more people). Focusing on these two aspects can be misleading today.

In the first place, the real story is no longer the rapid *rates* of city growth but the absolute *size* of the increments, especially in Asia and Africa. The fact is, the overall rate of urban growth has consistently declined in most world regions (Figure 1).

**Figure 1: Average Annual Rate of Change of the Urban Population, by Region, 1950-2030**



Source: United Nations. 2006. *World Urbanization Prospects: The 2005 Revision*, Table A.6. New York: Population Division, Department of Economic and Social Affairs, United Nations.

In the second place, the mega-cities are still dominant, but they have not grown to the sizes once projected. Today's mega-cities account for 4 per cent of the world's population and 9 per cent of all urban inhabitants. This is an important slice of the urban world, but it will probably not expand quickly in the foreseeable future, as shown in Figure 2. Many of the world's largest cities—Buenos Aires, Calcutta, Mexico City, São Paulo and Seoul—actually have more people moving out than in, and few are close to the size that doomsayers predicted for them in the 1970s.<sup>10</sup>

Some large cities are still growing at a rapid rate, but this is not necessarily bad. In a globalized economy, and in regions such as East Asia, rapid growth may be a sign of success rather than a cause for apprehension." To be sure, some of the mega-cities associated with poverty grew very fast over the last 30 years. But these are increasingly seen as exceptions.

Among today's 20 mega-cities, only six grew at rates consistently above 3 per cent a year over the last 30 years.

The others experienced mainly moderate or low growth. Over the next 10 years, only Dhaka and Lagos are expected to grow at rates exceeding 3 per cent a year. Six will grow at rates under 1 per cent.<sup>12</sup>

### Smaller Cities: Home to Half the Urban World

Although smaller cities are less often in the news,<sup>13</sup> 52 per cent of the world's urban population continue to live in settlements of less than 500,000 people. As Figure 2 indicates, smaller cities have always had more than half of the total urban population during recent decades. Moreover, they are expected to account for about half of urban population growth between 2005 and 2015. This graph also shows that larger cities slowly increase their slice of the urban pie over time, but, for the foreseeable future, the smaller cities will predominate.

The continuing role of smaller cities in absorbing urban population growth offers both comfort and concern. The case of Gaborone, presented in Box 3, reflects

### 3 PLANNING FOR THE URBAN POOR IN A BOOM TOWN

Gaborone, the capital of Botswana, illustrates many of the challenges faced by rapidly growing small towns. Since 1971, the city's population has jumped from 17,700 to more than 186,000 people, and is expected to reach 500,000 by the year 2020. In the process, Gaborone is being transformed from a dusty administrative post to a thriving financial, industrial, administrative and educational hub.

Gaborone is fortunate by comparison to many other small cities, because revenues from the country's diamond mines have eased its growing pains. Nevertheless, it faces low-density sprawl; high unemployment rates; a 47-per-cent poverty rate; the proliferation of the informal sector; high HIV/AIDS prevalence rates; residential segregation; and insufficient infrastructure, as well as inadequate water supply and sanitation.

In its brief history, the city has drafted several master plans, each of which has become quickly outdated. To regulate the settlement of its rapidly growing population, the city provided plots of land—free at first, then at nominal cost. Today, fully serviced plots belong to the state, which charges rents on them, but the houses belong to the plot titleholder for a period of 99 years. In order to prevent speculation on the plots, plot holders are not allowed to sell houses for ten years.

This approach has accommodated poor and middle-income people, but not the very poor, who end up in informal settlements where housing is unplanned, difficult to reach and not connected to water and sewage services. Open channels for storm water drainage are often filled with mud, sand or rubbish, leading to recurrent floods and the spread of diseases.

The prospect of accommodating half a million people by the year 2020 makes present problems look like the tip of the iceberg. City fathers talk of creating a sustainable city, but this dream is threatened by the dimensions of impending growth, as well as by the lack of trained planning personnel, critical information and a realistic long-term strategy.

Realizing the vision of a much-expanded and sustainable Gaborone calls for policymakers to act on lessons learned from experience in the city and elsewhere. It calls for the active involvement of the urban poor—the social group most affected by the transformation—and the firm commitment of national and local policymakers to making strategic decisions now in order to prepare for inevitable growth.

both aspects. The good news is that necessary actions are, in principle, easier in smaller cities. For instance, they tend to have more flexibility in terms of territorial expansion, attracting investment and decision-making.

The bad news is that smaller cities generally have more unaddressed problems and fewer human, financial and technical resources at their disposal. Smaller cities—especially those under 100,000 inhabitants—are notably underserved in housing, transportation, piped water, waste disposal and other services. In many cases, poor urban people are no better off than poor rural people. The situation is particularly grave for women, who bear a disproportionate burden of providing the household’s water, sanitation, fuel and waste management needs.<sup>14</sup>

Smaller cities may benefit from the worldwide trend towards political and administrative decentralization, under which national governments are devolving some of their powers and revenue-raising authority to local governments. Theoretically, this opens up new opportunities for each local government to display its unique advantages, attracting investment and economic activity.<sup>15</sup> Globalization, which increasingly decides

where economic growth will occur, may encourage this process because there is less need to concentrate certain economic activities.<sup>16</sup>

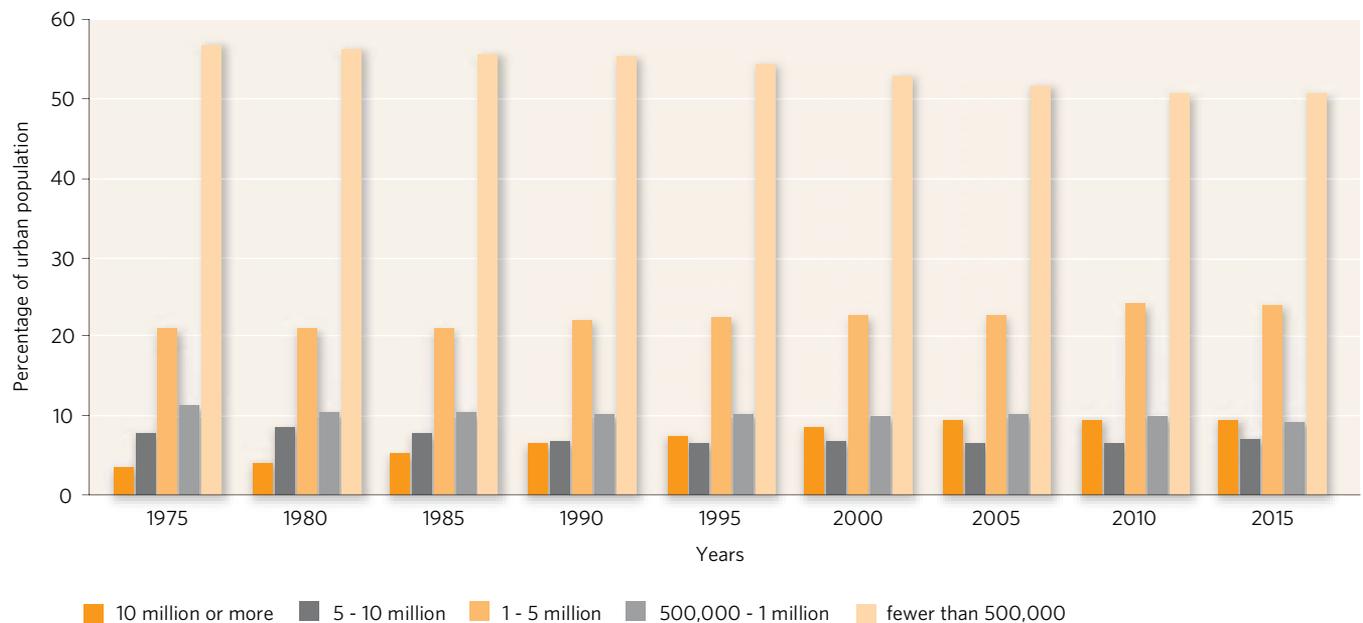
Many smaller cities cannot yet take advantage of decentralized government; but with improved governance, better information and more effective use of resources, combined with the inherent flexibility of smaller cities, decentralization could improve local authorities’ capacity to respond to the challenge of urban growth. The local level also provides greater opportunity for the active participation of women in the decision-making process. This could improve accountability and delivery of essential services.<sup>17</sup>

### Different Speeds, Different Policies

The timing and rhythm of urbanization vary considerably among less developed regions (see Figure 3). General trends mask wide local variations by country and by city. This Report comments only on a few salient features.

Case studies in different regions and countries reveal that policymakers have usually been loath to accept urban growth and that many have attempted to avoid it by reducing rural-urban migration.

**Figure 2: Urban Population, by Size Class of Settlement, World, 1975-2015**



Source: United Nations. 2006. *World Urbanization Prospects: The 2005 Revision*, Table A.17. New York: Population Division, Department of Economic and Social Affairs, United Nations.

Latin America and the Caribbean have had a precocious and rapid transition in comparison to other less developed regions.<sup>18</sup> In 2005, 77 per cent of the region's population was defined as urban, and a higher percentage of its population than Europe's lived in cities of more than 20,000 inhabitants. The Latin American urban transition took place in spite of many explicit anti-urban policies. On the whole, the urban transition has been positive for development. A proactive stance to inevitable urban growth would have minimized many of its negative consequences, particularly the formation of slums and the lack of urban services for the poor.

The Arab States of Western Asia range from very high to low urbanization levels, with most in an intermediate stage.<sup>19</sup> Urban centres dominate the economies of most of these countries, and rural-urban migration is still strong in several of them. Coupled with natural increase (that is, more births than deaths), this generates some high rates of urban growth. Government policies are generally hostile to migration, which helps to limit the supply of housing for the urban poor, who often find themselves in informal settlements.<sup>20</sup> As elsewhere,

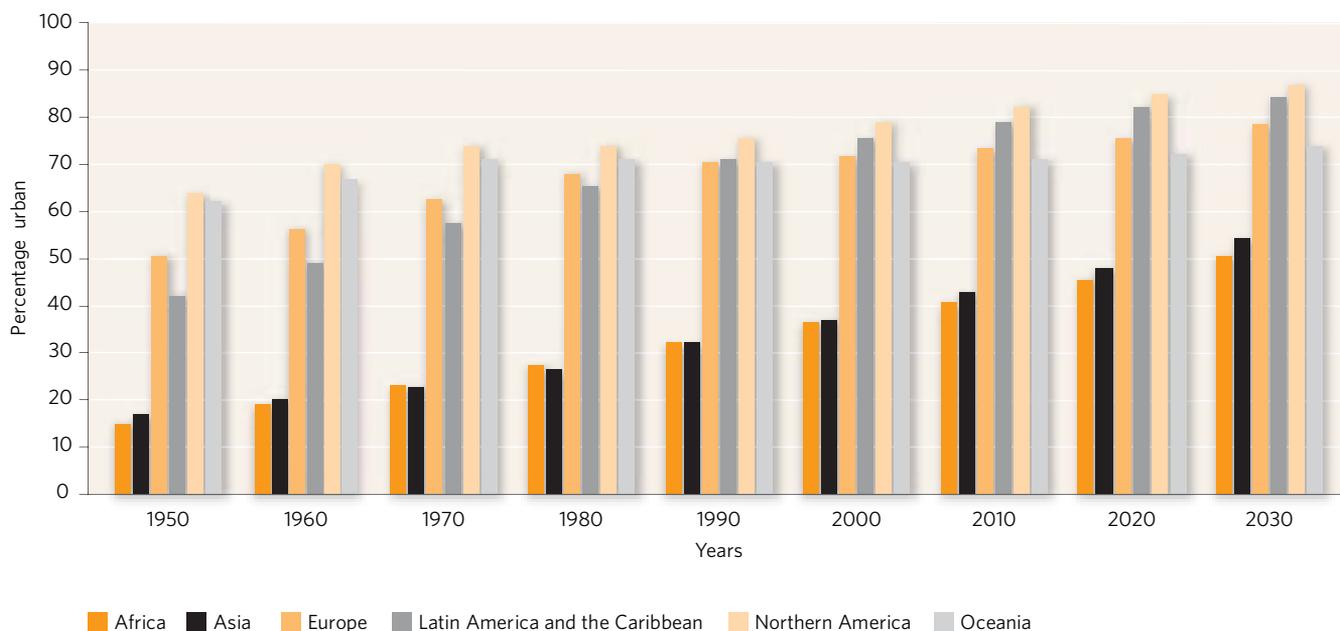
failure to plan ahead for urban growth increases density and slum formation in these neighbourhoods.

Asia and Africa are undoubtedly the biggest story, because of their large populations and their prospects for huge urban growth. In 2005, Asia had an urbanization level of 40 per cent, and Africa, 38 per cent. In spite of political opposition to urbanization in many countries, rates of urban growth are expected to remain relatively high over the next 25 years, with marked increases in the urban population of both continents and of the world.

Despite being the least urbanized region in the world, sub-Saharan Africa has an urban population that is already as big as North America's.<sup>21</sup> The pace of urban growth has tapered off recently, reflecting slower economic growth and rates of natural population increase, as well as some return migration to the countryside. Still, the region is expected to sustain the highest rate of urban growth in the world for several decades, with underlying rates of natural increase playing an important role.

Certain features of migration and urbanization in sub-Saharan Africa are unique, for example, predominance

**Figure 3: Percentage of Population at Mid-year Residing in Urban Areas, by Region, 1950-2030**



Source: United Nations, 2006. *World Urbanization Prospects: The 2005 Revision*, Table A.2. New York: Population Division, Department of Economic and Social Affairs, United Nations.

of smaller cities, low population density, high prevalence of circular or repeat migration and links to HIV/AIDS. In some parts of the region, the primary influence on urbanization is the movement of people uprooted by drought, famine, ethnic conflicts, civil strife and war. In recent years, many cities have lost their traditional health and social advantages over their rural counterparts. The impoverishment of urban life has become one of the more conspicuous challenges facing the region.

Despite these features, much migration to urban areas has had a positive impact both on the economy and on the migrants themselves.<sup>22</sup> Many are comparatively poor, especially on arrival, yet migrants generally express a preference for the city over the rural life they left behind.

Policy-makers in the region, however, appear to be increasingly averse to urban growth. People living in rural poverty are less concentrated, less visible and less volatile. They lack the potential for mass mobilization and urgent political demands typical of the urban poor. Yet urbanization and urban migration in Africa probably benefit both individual migrants and national economies. Despite conditions of life for the urban poor, given their resources, constraints and opportunities, migrants' decisions are quite rational.

The vast and heterogeneous Asia-Pacific region contains some of the largest and richest economies, as well as some of the smallest and poorest. It is home to three fifths of the world's population, half of its urban population and 11 of the 20 largest cities in the world. Asia-Pacific's urban population has increased by five times since 1950, yet levels of urbanization are low in all but a few countries.

China and India together contain 37 per cent of the world's total population; thus, their approaches to urban growth are particularly critical to the future of humankind.

India's urban areas still hold less than 30 per cent of the total population.<sup>23</sup> This is expected to rise to 40.7 per cent by 2030. This relatively low level is partly attrib-

utable to a stringent definition of "urban" in India (for instance, it excludes peri-urban areas). Even with such a definition, urbanites are expected to number some 590 million in 2030.

Indian policymakers hope to further retard urban growth by implementing the National Rural Employment Scheme enacted in 2005. Through it, the Government assumes the responsibility for providing a legal guarantee for 100 days of employment in every financial year for every rural household with an adult member willing to do unskilled manual work.<sup>24</sup> It

remains to be seen what impact this will have on rural-urban migration.

Natural increase is the major factor in India's urban growth. Employment opportunities in the formal sector are not expanding and much of the urban labour force works in the informal sector; but this does not prevent migrants from coming in search of the intangible advantages, opportunities and amenities of larger cities. Poverty in small towns has always been higher than in the

million-plus cities and medium-size towns; also, between 1987-1988 and 1993-1994, urban poverty declined more sharply in the million-plus cities than in medium cities and small towns.

As elsewhere, the absolute increase in urban population has challenged the ability of urban authorities to meet increased demands for housing and services. Voluntary associations and Organizations of the Urban Poor (OUPs) have, however, made remarkable advances in addressing these problems, in the face of considerable odds.

India's urban trajectory contrasts sharply with that of China,<sup>25</sup> where the size of the urban population was strictly controlled between 1949 and 1978, and city life was the privilege of a minority. Subsequent economic policies, however, favoured coastward migration to rapidly growing urban centres in special economic zones. Eventually, migration restrictions were slackened and official bias against cities declined as they became the engine of China's rapid economic growth.

*Much migration to urban areas has had a positive impact both on the economy and on the migrants themselves. Many are comparatively poor, especially on arrival, yet migrants generally express a preference for the city over the rural life they left behind.*

China is now a major world manufacturing centre, and almost all of its factories are located in or near cities. The country has more than 660 cities, according to government data. While urban-rural economic disparities might even have widened, living in cities no longer brings automatic privileges. It is projected that, in less than a decade, more than half of the Chinese population, some 870 million people, will be urbanites. It will then have 83 cities of more than 750,000 people, only six of which will house more than 5 million inhabitants. The coastal location of many of these cities is a cause for concern, because of the eventual impacts of global warming on low-lying coastlands (Chapter 5).

China is now at the peak of its urban transition. Given its low urban fertility—an outcome of family planning policies, rising costs of education and shifts in the lifestyle aspirations of urban dwellers—rural-urban migration has been a much more important contributor to urban growth in China than in most other developing countries. It is officially estimated that some 18 million people migrate from rural areas to cities every year, with men predominating. The scale and speed of the transformation are unprecedented; it is accompanied by a variety of environmental and social problems, and yet it is ineluctable.

### Basing Policies on Facts, not Biases

Policymakers have understandably been much concerned with the speed and magnitude of urban growth. Many would prefer slower growth or none at all; slower growth would theoretically give them more flexibility to deal with urban problems. Generally, they attempt to slow growth by restricting incoming migration but, as Chapter 3 argues, this rarely works.

Moreover, such efforts reflect a poor understanding of the demographic roots of urban growth. Most people think that migration is the dominant factor; in fact, the main cause today is generally natural increase. Reclassification of formerly “rural” areas and residents as “urban” also contributes to urban growth.

In developing countries, city growth during the “second wave” (see Box 2) is being driven by higher rates of natural increase than in Europe and North America at the height of their urbanization processes.

The latest comprehensive research effort to separate natural increase from other components of urban growth puts the contribution of natural increase at about 60 per cent in the median country.<sup>26</sup> The remaining part of urban growth—roughly 40 per cent—is a combination of migration and reclassification.

As time passes and as countries become more urban, the proportion of urban growth attributable to natural increase inevitably rises. That is, the higher the level of urbanization in a country, the smaller the pool of potential rural-urban migrants, and the larger the pool of urbanites contributing to natural increase.

Of course, country experiences vary a good deal. In India, a recent assessment of the components of urban growth 1961-2001 found that the share of growth attributable to urban natural increase ranged from 51 per cent to about 65 per cent over the period.<sup>27</sup> Some 65 per cent of current urban growth in Latin America stems from natural increase, despite steep declines in fertility rates, especially in urban areas.<sup>28</sup> China, where migration has recently predominated, is unusual.<sup>29</sup>

Given the greater importance of natural increase and the failure of anti-migration policies, it seems obvious that fertility decline is much more likely than migration controls to reduce the rate of urban growth. Since high fertility in rural areas often underlies rural-urban migration, lower fertility in both rural and urban areas can decelerate urban growth. Such a reduction would give policymakers more time to prepare for the expansion of the urban population.

Policies that aim to slow urban growth should therefore shift their attention to the positive factors that affect fertility decline—social development, investments in health and education, the empowerment of women and better access to reproductive health services. On reflection, it is surprising how rarely this agenda has influenced policy decisions, as opposed to an anti-migration approach.<sup>30</sup> This topic is taken up in the final chapter of this Report.





# 2

## People In Cities: Hope Countering Desolation

*As the developing world becomes more urban and as the locus of poverty shifts to cities, the battle to achieve the MDGs will have to be waged in the world's slums.<sup>1</sup>*

The unprecedented urban growth taking place in developing countries reflects the hopes and aspirations of millions of new urbanites. Cities have enormous potential for improving people's lives, but inadequate urban management, often based on inaccurate perceptions and information, can turn opportunity into disaster.

Conscious of this gap, the Programme of Action of the International Conference on Population and Development recommended that: "Governments should increase the capacity and competence of city and municipal authorities to manage urban development, to safeguard the environment, to respond to the need of all citizens, including urban squatters, for personal safety, basic infrastructure and services, to eliminate health and social problems, including problems of drugs and criminality, and problems resulting from overcrowding and disasters, and to provide people with alternatives to living in areas prone to natural and man-made disasters."<sup>2</sup> This chapter addresses some of these concerns, particularly as they affect women, in light of expected future urban growth in developing countries.

### The Unseen Dramas of the Urban Poor<sup>3</sup>

Until recently, rural settlements were the epicentre of poverty and human suffering. All measures of poverty, whether based on income, consumption or expenditure, showed that rural poverty was deeper and more widespread than in cities.<sup>4</sup> Urban centres on the whole offered better access to health, education, basic infrastructure, information, knowledge and opportunity.<sup>5</sup> Such findings were easy to understand in view of budgetary allocations, the concentration of services and the other intangible benefits of cities.

Poverty, however, is now increasing more rapidly in urban areas than in rural areas but has received far less attention. Aggregate statistics hide deep inequalities and gloss over concentrations of harsh poverty within cities. Most assessments actually underestimate the scale and depth of urban poverty.<sup>6</sup>

Hundreds of millions live in poverty in the cities of low- and middle-income nations, and their numbers are sure to swell in coming years. Over half of the

◀ A woman walks in the shallows over the Yangtze River in Chongqing, China. With the completion of the Three Gorges Dam, the water level will rise dramatically.

© Ian Teh/Panos Pictures

urban population is below the poverty line in Angola, Armenia, Azerbaijan, Bolivia, Chad, Colombia, Georgia, Guatemala, Haiti, Madagascar, Malawi, Mozambique, Niger, Sierra Leone and Zambia. Many others have 40 to 50 per cent living below the poverty line, including Burundi, El Salvador, the Gambia, Kenya, the Kyrgyz Republic, Moldova, Peru and Zimbabwe. Many other nations would be included in this list if their poverty lines made allowance for the real costs of non-food necessities in urban areas.<sup>7</sup>

Urban mismanagement often squanders urban advantages and the urban potential for poverty reduction. Although urban poverty is growing faster than in rural areas, development agencies have only recently begun to appreciate that they need new interventions to attack its roots.

### Slums: Unparalleled Concentration of Poverty

Poverty, begging and homelessness have been part of the urban scene since the first cities of Mesopotamia. Poor people are, for the most part, consigned to socially segregated areas generically called “slums” (see Box 4). Our concept of modern slums dates back to the industrial revolution as experienced in 19th-century London or early-20th-century New York.<sup>8</sup>

The basic features of slum life have not changed: *The difference today is one of scale*. Slum dwellers of the new millennium are no longer a few thousand in a few cities

of a rapidly industrializing continent. They include one out of every three city dwellers, a billion people, a sixth of the world’s population.<sup>9</sup>

Over 90 per cent of slum dwellers today are in the developing world. South Asia has the largest share, followed by Eastern Asia, sub-Saharan Africa and Latin America. China and India together have 37 per cent of the world’s slums. In sub-Saharan Africa, urbanization has become virtually synonymous with slum growth; 72 per cent of the region’s urban population lives under slum conditions, compared to 56 per cent in South Asia. The slum population of sub-Saharan Africa almost doubled in 15 years, reaching nearly 200 million in 2005.

The United Nations Millennium Declaration recognized the importance of addressing the situation of slum dwellers in reducing overall poverty and advancing human development. Despite the strength of this commitment, monitoring progress on the situation of slum dwellers has been a challenge.<sup>10</sup> Proactive policy interventions are needed now if nations are to meet the spirit of Target 11 of the Millennium Development Goals” and ameliorate the lives of millions of the urban poor.

### The Persistent Disparities

Nowhere are the disadvantages of the urban poor compared with other city dwellers more marked than in the health area.<sup>12</sup> Poor women are at a particular disadvantage. Although cash income is much more important in cities than in villages, income poverty is only one aspect of urban poverty. Others are poor-quality and overcrowded shelter, lack of public services and infrastructure such as piped water, sanitation facilities, garbage collection, drainage and roads, as well as insecure land tenure (see Box 5). These disadvantages increase the health and work burdens of the urban poor and also increase their risks from environmental hazards and crime.

Poor people live in unhealthy environments.<sup>13</sup> Health risks arise from poor sanitation, lack of clean water, overcrowded and poorly ventilated living and working environments and from air and industrial pollution. Inadequate diet reduces slum-dwellers’ resistance to disease, especially because they live in the constant presence of pathogenic micro-organisms.<sup>14</sup>

#### 4 URBAN SLUMS AND THE URBAN POOR

The term “slum” is used to refer to many types of housing, including those that could be upgraded. Terms such as “slum”, “shantytown”, “informal settlement”, “squatter housing” and “low-income community” are often used interchangeably.

According to UN-Habitat, a “slum household” is a group of individuals living under the same roof in an urban area who lack one or more of the following: durable housing, sufficient living area, access to improved water, access to sanitation and secure tenure.<sup>1</sup>

Not all poor people live in slums, and not all people who live in areas defined as slums are poor. However, for simplicity’s sake, this Report equates the urban poor with slum dwellers.

## 5 SLUM LIFE AND NEW CITIES IN EGYPT<sup>1</sup>

Feryal El Sayed has called a tiny square room crammed with a bed and two seats, and a tinier cubicle containing a kitchen and a bathroom, “home” for the past 15 years. The makeshift roof is falling apart, and Ms. El Sayed, 62, had to install plastic sheeting under the ceiling to catch the debris. However, she is still better off than some of her neighbours in Ezbet El Haggana’s District 3, who have no roofs over their heads and who, on rainy nights, are forced to sleep under their beds.

Ezbet El Haggana, a sprawling slum in the north-east of Cairo, is one of the largest urban Ashwaiyyat, or “informal areas”, encircling this city. With more than a million inhabitants, it is among the few places where the poorest of Egypt’s poor can afford some sort of housing—a place where high-voltage

cables hum constantly over their heads, sewage water seeps under their feet and the fumes of burning garbage fill their lungs.

“In addition to all sorts of diseases, we always have fires in these houses because of the high-voltage cables,” says Hazem Hassan, of the Al-Shehab Institution for Comprehensive Development, a grass-roots organization that has been assisting the residents of Ezbet El Haggana since 2001. Al-Shehab will soon construct new roofs for 50 of the most threatened dwellings in the district, including Ms. El Sayed’s.

Cairo’s population has exploded during the last three decades, doubling from 6.4 million people in 1975 to 11.1 million in 2005. The latest statistics of the Egyptian Ministry of Housing, Utilities and Urban Communities show

that there are 1,221 “informal areas” similar to Ezbet El Haggana. They house 12-15 million of the country’s 77 million people. Sixty-seven of these are in Greater Cairo.

The Ministry has been diverting the flow of people from Egypt’s big cities through development projects and low-cost housing in “new cities”. Those in the Cairo area alone have absorbed 1.2 million people who would otherwise have ended up living in Ashwaiyyat. However, despite Government incentives, many still cannot afford to move there. People like Ms. El Sayed are sticking to Ezbet El Haggana. Despite her predicament, she remains optimistic, perhaps because she realizes that she is more fortunate than many of her neighbours—and that a new roof is on its way.

The United Nations Development Programme’s *Human Development Report* for 2006 provides an excellent overview and analysis of the relations between power, poverty and water.<sup>15</sup> It highlights the fact that the stark realities of slum life defy statistical analysis. Frequently, many people live in compounds made up of several houses where one toilet serves all adults and children. Toilets may be reserved for adults, and children forced to go elsewhere in the compound or in the streets where they play.<sup>16</sup> Sharing three toilets and one shower with 250 households in a community is not at all unusual in cities of sub-Saharan Africa. Conditions like these increase stress on all inhabitants, especially women who are also subject to greater risks of gender-based violence.<sup>17</sup> In Latin America, only 33.6 per cent of the urban poor have access to flush toilets, compared to 63.7 per cent of their non-poor urban counterparts.<sup>18</sup>

Water is a scarce and expensive resource for the urban poor, often obtained in small quantities from street vendors. Bought this way, unit costs can be much higher than for people who have running water in their homes.

If there is a piped supply, obtaining it may involve long journeys to the neighbourhood water post, long waits, tiring trips back home with full jerry-cans, careful storage to minimize wastage and reusing the same water several times, increasing the risk of contamination.<sup>19</sup>

Water chores take up a substantial part of women’s and girls’ time. A partial time-use study covering 10 sites in East Africa found that the waiting time for water increased from 28 minutes a day in 1967 to 92 minutes in 1997.<sup>20</sup> The physical and time burdens come not so much from long distances from the source of supply, as in villages, but from the large numbers who have to use the same source (see Box 6).

The association between poverty, environment and housing in urban areas is critical because it indicates a key area for intervention. Policies directed to improving shelter in urban areas can have huge impacts on poverty reduction and on environmental well-being. Advances in health and mortality indicators depend very much on urban water and sewage treatment.

## 6 GETTING WATER IN KIBERA, AFRICA'S LARGEST SLUM'

"Some say half a million people live there. Others put the figure at more than a million. No one really knows . . . Kiberans live in tin shacks or mud "houses" with no toilets, no beds and little water to speak of. Electricity is almost non-existent. Most of the pit latrines are full and locked up, so people use the aptly named "flying toilets" where they excrete into plastic bags and throw them in piles on the street. Children play on the heaps.

"Middle-aged Sabina sits by a standpipe to charge people for filling 20-litre containers with supposedly clean water. But the pipes, many of which leak, run through open sewerage ditches. When the pressure drops, as it does most days, the pipes suck in excrement. "I charge 3 shillings (4 cents) for a jerry can," she explains. "But when there is less water, I put the price up to 5.5 shillings." Sabina sits there 11 hours a day but doesn't get paid. Standpipes are controlled by shadowy figures, rumoured to be government officials who make good money out of them."

### Women's Empowerment and Well-being: The Pillars of Sustainable Cities

*As women are generally the poorest of the poor . . . eliminating social, cultural, political and economic discrimination against women is a prerequisite of eradicating poverty . . . in the context of sustainable development.*<sup>21</sup>

The social and physical amenities of cities facilitate gender-equitable change. Indeed, the concentration of population in urban areas opens many possibilities for women—whether migrants or natives—to meet, work, form social support networks, exchange information and organize around the things of greatest importance to them. Cities tend to favour greater cultural diversity and, as a corollary, more flexibility in the application of social norms that traditionally impinge on women's freedom of choice.

Compared with rural areas, cities offer women better educational facilities and more diverse employment options. They provide more opportunities for social and political participation, as well as access to media, information and technology. Cities offer many roads to

decision-making power through community and political participation. Women can use urban space to project their voices, to participate in community politics and development and to influence social and political processes at all levels.

Women stand to benefit from the proximity and greater availability of urban services, such as water, sanitation, education, health and transportation facilities; all of these can reduce women's triple burden of reproductive, productive and community work and, in so doing, improve their health status and that of their children and families.

### EDUCATION IN URBAN SETTINGS: CLOSING THE GENDER GAP?

Urbanization increases girls' access to education and promotes cultural acceptance of their right to education. Primary, and especially secondary, education for girls has crucial multiplier effects that increase women's social and economic status and expand their freedom of choice. Educated women tend to marry later and have fewer and healthier children.<sup>22</sup> In adulthood, they have greater employment potential, income-earning capacity and decision-making authority within the household.<sup>23</sup> Other benefits include knowledge and capacities to maintain and protect their health, including preventing unwanted pregnancies and sexually transmitted infections (STIs), including HIV/AIDS. All of these are helpful in the fight against poverty.

Families' ability to enrol girls as well as boys in school, and to keep them there, strongly influences the extent and depth of urban poverty and the transmission of poverty from one generation to the next. Unfortunately, in countries with low overall enrolment, many girls in poor urban areas drop out before they are functionally literate. Demographic and Health Survey data point to four main reasons for this: lack of finances; early marriage and pregnancy; household responsibilities; and poor performance. School fees, uniforms and materials, loss of income or household help, expenditures on transport and other costs of sending children to school may be prohibitive for many poor families and reduce the urban educational advantage. If families are forced to choose, daughters are typically the first to do without or to be pulled from school.

Data on within-city differentials reveal dramatic differences in access to education and levels of literacy between slums and wealthier neighbourhoods. In some countries, such as Bangladesh, Colombia, India and Pakistan, literacy of women living in slums is 30-50 per cent lower than those of non-slum communities.<sup>24</sup> Young people's ability to continue in school is influenced by age at marriage, pregnancy and household headship. Young women and men in low-income households are more likely to have children, be married or head a household than their upper-income counterparts.<sup>25</sup>

### THE JOB MARKETPLACE: A WAY OUT?

Employment possibilities are far more diverse in urban areas for both men and women. Urbanization has significantly boosted women's labour force participation.<sup>26</sup> Paid employment for women not only increases household income but can trigger transformations in gender roles and elevate women's status in the family and society.

Worldwide, there has been a significant increase in women's non-agricultural wage employment during recent years.<sup>27</sup> New opportunities have arisen, especially in tradable sectors<sup>28</sup> and in home-based businesses linked to global production networks.<sup>29</sup> For example, of the 50 million workers in export processing zones, 80 per cent are young women.<sup>30</sup>

However, most growth of female employment is in the informal sector, which accounts for most new employment opportunities in the world,<sup>31</sup> and where

women are a large majority, especially in Africa and Asia.<sup>32</sup> Informal employment is critical in enabling women to absorb the economic shocks that poor households experience. In this regard, women's employment, paid and unpaid, is of fundamental importance in keeping many households out of poverty.<sup>33</sup> The downside is that much informal work is unstable, of poor quality and poorly paid.<sup>34</sup>

### THE LONG ROAD TO PROPERTY OWNERSHIP FOR WOMEN

Physical and financial assets offer women more than economic well-being and security. Legal property tenure increases women's opportunities to access credit, generate income and establish a cushion against poverty. It also empowers them in their relationships with their partners and their families, reduces vulnerability to gender-based violence and HIV/AIDS and provides a safety net for the elderly.

Women own less than 15 per cent of land worldwide.<sup>35</sup> In some countries, women cannot legally own property separately from their husbands, particularly in parts of Asia and sub-Saharan Africa. Lacking legal title to land and property, women have virtually no collateral for obtaining loans and credit, thus limiting their economic options. In some settings, although women can legally own and inherit property, custom dictates that men control it and that it passes only to male heirs on a man's death. It is difficult or impossible in these circumstances for women to exercise their property rights in practice.

There is evidence that the difficulty of securing title to property in rural areas is prompting women to migrate to cities in hopes of securing property there, where prospects are assumed to be better.<sup>36</sup> Women may also have better access to legal information and support in urban areas. Because of the greater social dynamism and range of economic possibilities open to women, cities are likely to offer more opportunities to acquire property in the long run.

Legal reforms are still necessary, however, to secure women's equal rights to own property. Where laws are in place, cities continue to need programmes and recourse mechanisms to tackle informal barriers such as customary practices, low awareness of rights, the high

#### 7 HELPING STREET GIRLS FIND WORK

The UNFPA Ethiopia country office supports the Good Samaritan Training Centre, an urban-based NGO providing vocational training to young women and girls, aged 18-25, with a view to enabling self-employment or finding paid work. The main target groups are street girls—girls from low-income families exposed to street life by economic deprivation, neglect, family break-ups, civil strife and war. Apart from training in different skills, such as leather handicrafts, weaving, knitting, sewing, embroidery and hairdressing, the Centre provides training on health, home management, nutrition and HIV/AIDS and family planning.

cost of land and housing and discriminatory lending and titling policies.

Property rights and access to credit are closely linked, so it is not surprising that women face difficulties in obtaining financial assets. Microcredit programmes have partially filled this need. Making its mark initially in rural settings, microcredit is also allowing poor urban women to leverage their capacities and improve their incomes.

#### **POWER THROUGH VOICE: GETTING IT DONE THROUGH COMMUNITY ORGANIZATIONS**

Decision-making power is one of the main indicators of women's empowerment. The prospects for women's formal participation in politics are improving, despite the many challenges they face, including gender discrimination and prejudice, multiple poorly-rewarded responsibilities and calls on their time and energy, lack

of support in crucial areas such as reproductive health and lack of resources.

Some governments have enacted quotas or parity laws to address these barriers and ensure that women have a critical level of participation in city councils and local governments.<sup>37</sup> Nevertheless, women make up only 16 per cent of members of national parliaments in Africa and Asia and 9 per cent in the Arab States.<sup>38</sup> These percentages are well below what is believed to be a "critical mass" for women to influence policy and spending priorities.

Despite this bleak picture in the capitals of nations, women's participation in decentralized governance has increased. Local spheres of government offer greater opportunities for women's empowerment and political participation, a situation that reflects positively on women's prospects as urbanization increases. Moreover, countries with a higher percentage of women councillors are likely

### **8 THE MANY FACES OF WOMEN'S ORGANIZATIONS IN URBAN AREAS**

Urban areas, with better-quality information, communication and technology, enable women to organize more quickly and more effectively, and allow groups that start off as small collectives to grow into larger networks and even international movements. The Huairou Commission, born out of the Fourth World Conference on Women in Beijing, is one such example. The presence of 35,000 non-governmental organization participants from around the world provided the momentum for the continued networking of these mostly women-led organizations, making it a true global movement that has influenced policy-making at the local, regional and international levels on issues of habitat and the environment.<sup>1</sup>

With increased ability to use news media, radio and television, messages can be disseminated instantaneously, encouraging learning in areas such as health, propelling specific causes of interest and advancing knowledge

of women's rights on a broad front. CEMINA (Communication, Education, and Information on Gender), for example, reaches thousands of listeners in some of the poorest communities across Brazil. With 400 radio programmes, the Women's Radio Network brings education on gender equality, health and environmental issues into many homes.<sup>2</sup>

From civic groups to savings groups, urban women have been active agents of change in their communities—working to meet shelter needs and improve essential services, upgrade slums and provide the backbone to economic security.<sup>3</sup> The Self-Employed Women's Association, a trade union of 700,000 members in six Indian states, has set up facilities that provide health care, child-care and insurance services, research, training, communication and marketing, as well as housing and infrastructure for poor urban women working in the informal economy.<sup>4</sup> Such efforts often carry

on without government or international support; however, when existing efforts of women are recognized and incorporated into programming, it has proven invaluable. The CAMEBA project is a vibrant demonstration of this: A slum upgrading project in Caracas, Venezuela, backed by the World Bank, it became more efficient and sustainable after the inclusion of the women's groups which had already been working on the ground for several years.

In many cases, women's organizations are able to do things other social movements cannot. Some of the disadvantages women face can be turned into strengths of sorts. Women and their organizations are less of a threat, not only to governments but to local gangs and the like. Thus, there are situations where men's organizations would quickly be either corrupted or disrupted by the powers that be, whereas women's organizations can gain power and support.<sup>5</sup>



▲ Women have a chance to socialize and discuss their own concerns on a women's-only car on the commuter railroad line in Mumbai, India.

© Angela Jimenez/World Picture News

to have a higher number of women parliamentarians, which may, in turn, benefit women at the municipal level.<sup>39</sup>

Urbanization can thus be a powerful factor in creating the conditions for women's empowerment. Turning this potential into reality is one of the most effective ways of promoting human rights, improving the living conditions of the poor and making the cities of developing countries better places in which to live.

*Cities lend themselves to women's social and political participation at many levels.* For poor women whose lives have been confined to home, family and work, the act of joining an organization immediately broadens their prospects. When women actively participate in an organization, or take on leadership roles, they gain self-confidence, new skills, knowledge and a greater understanding of the world. Organizing can address many of the limitations that poverty imposes on poor

women; it can begin to counter the costs and risks of informal work. It can also help to reduce poor women's vulnerability, insecurity and dependence, including a lack of knowledge about the outside world and how it works.

Organizing also helps women who have few assets to pool resources, thereby increasing their economic power. Savings and credit groups may help the working poor access microfinance services, and producers with little capital may buy raw materials at wholesale prices by combining their resources.<sup>40</sup>

Such advantages could be enhanced with more support. Poor women need a representative voice in the institutions and processes that establish social and economic policies in a global economy, in order to continue improving the living and working conditions of the poor. International, regional and national negotiations regarding free trade agreements, the Millennium

Development Goals and poverty reduction strategies all need to include the voices and concerns of the urban poor and, in particular, informal workers, the majority of whom are women. Ensuring a voice for poor urban women at the highest level requires that government and international organizations support the growth of their organizations and build capacity for leadership.

**ACCESSING REPRODUCTIVE HEALTH: IT SHOULD BE MUCH BETTER**

Access to health care is particularly critical for women, because of their reproductive functions, because they are disproportionately burdened with providing care for the elderly and the sick and because they do more to relieve poverty at the community level.<sup>41</sup> Better access to education and employment for women contributes to their overall empowerment, their capacity to exercise their right to health, including reproductive health, and, overall, improves their life chances.

These services and opportunities tend to be more readily available to women in urban than in rural areas. But for poor women, lack of time and money, as well as the lack of freedom to make household decisions, or even to move about the city, can negate these advantages. In

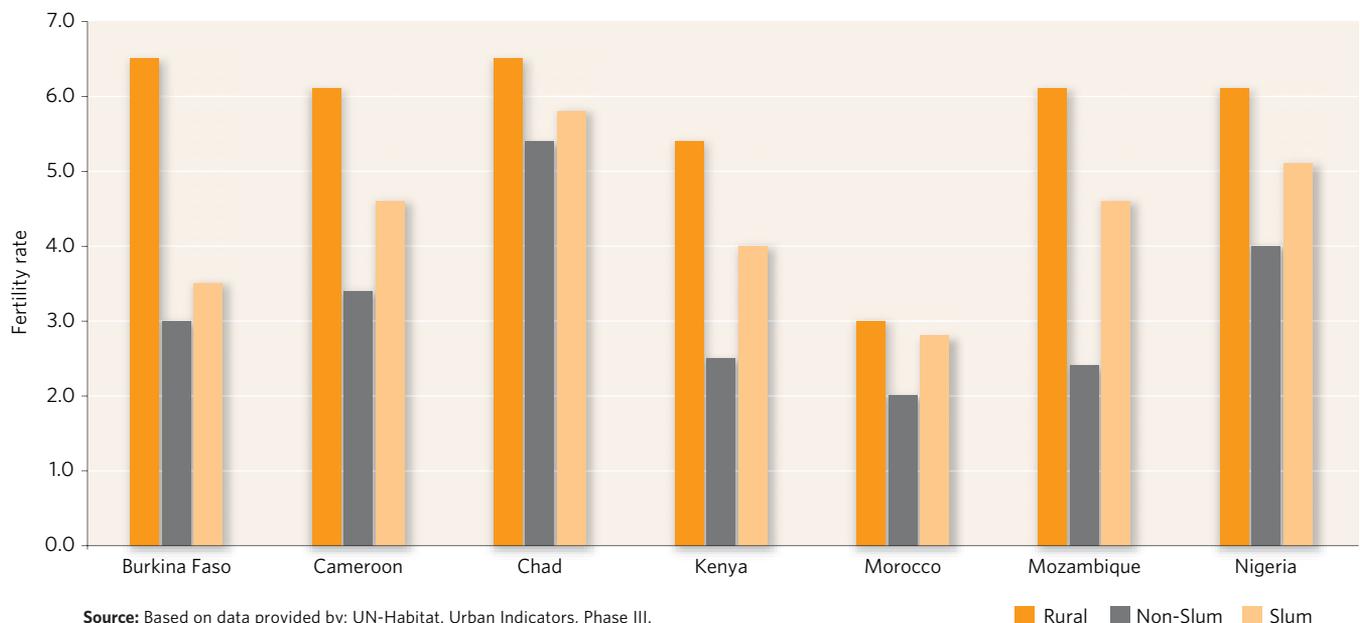
urban areas, inclusive health policies and programmes, accompanied by better targeting of services and resources, could rapidly improve women’s health, in particular their reproductive health.

Gender relations and poverty condition how couples and families approach sexual and reproductive behaviour. Poor urban women are exposed to higher levels of reproductive health risks than other urban women. They are also less likely to obtain good-quality services. They are more likely to face gender-based violence in the home and on the streets and continue to be subject to harmful traditional practices.

Total fertility rates are lower in urban than in rural areas throughout the world.<sup>42</sup> But this does not mean that all urban women have the same access to reproductive health care, or even that they can all meet their needs for contraception. Poor women within cities are significantly less likely to use contraception and have higher fertility rates than their more affluent counterparts. At times their reproductive health situation more closely resembles that of rural women<sup>43</sup> (see Figure 4).

Unmet need for contraception among women predictably varies according to relative poverty. Surveys covering Asia, Latin America, North Africa and

**Figure 4: Total Fertility Rate for Residents of Urban Slum and Non-slum Areas and for Rural Areas: Selected African Countries, 2003-2004**



sub-Saharan Africa show generally higher levels of unmet need among the rural population when compared to the urban population, with poor urbanites midway between the rural and the urban population as a whole.<sup>44</sup> In South-East Asia, for example, estimated unmet need is 23 per cent among the urban poor, compared to only 16 per cent among the urban non-poor.<sup>45</sup>

Overall, poverty may be a better indicator of fertility patterns than rural or urban residence. For policymakers concerned with the rate of urban growth, it will thus be especially important to look at the interactions between population and poverty, and increasingly within urban settings.<sup>46</sup> Prioritizing women's empowerment, augmenting their access to education and employment and providing good quality sexual and reproductive health information and services to both women and men leverages their choices and is conducive to smaller, healthier families. This helps meet the needs and rights of individuals, while simultaneously improving prospects for economic growth and human well-being.

### GENDER-BASED VIOLENCE

Gender-based violence, with its tremendous physical, psychological and financial damage inflicted on women and society, is a feature of urban life, regardless of income or educational status. Violence in its various forms, from intimidation to sexual assault, restricts the ability of women to move in and around the city,<sup>47</sup> reducing their freedom to seek work, social services and leisure activities. Physical and sexual abuse is also a factor in unwanted pregnancies, sexually transmitted infections (including HIV) and complications of pregnancy.<sup>48</sup>

Women in urban settings are far more likely than their rural counterparts to report having ever experienced violence.<sup>49</sup> Part of this can be ascribed simply to better possibilities in urban areas for denouncing violence. Yet, women may, in fact, be at greater risk of gender-based violence in urban areas, because of the breakdown in

*Women in urban settings are far more likely than their rural counterparts to report having ever experienced violence, in part because of the breakdown in cultural mores that govern relations between the sexes.*

cultural mores that govern relations between the sexes and the lower likelihood that neighbours would intervene. Poverty, the move to a new environment (in the case of migrants), unemployment, inadequate wages, social exclusion and racism can produce frustration among men and vulnerability among women. The most deprived are the most likely to be affected.<sup>50</sup> Street children and sex workers are especially vulnerable.<sup>51</sup>

Rapidly shifting norms regarding male and female roles can also increase domestic violence. Research in the Philippines found that poverty and urban residence are associated with a higher likelihood of intimate-partner violence.<sup>52</sup> A study of urban women in Moshi, United Republic of Tanzania, found that 21.2 per cent had experienced an incident of intimate partner violence in the year preceding the survey, and more than a quarter had experienced it at some time in their lives.<sup>53</sup>

### MATERNAL AND INFANT MORTALITY

Maternal mortality remains astoundingly high, at about 529,000 a year, more than 99 per cent in developing countries, and much of it readily preventable.<sup>54</sup> Four out of five deaths are the direct result of obstetric complications,<sup>55</sup> most of which could be averted through delivery with a skilled birth attendant and access to emergency obstetric services.

Skilled attendance and access to emergency care explain why maternal mortality is generally lower in urban areas, where women are three times more likely to deliver with skilled health personnel than women in rural areas.<sup>56</sup> However, poor urban women are less likely to deliver with a skilled birth attendant.<sup>57</sup> For example, only 10-20 per cent of women deliver with skilled health personnel in the slums of Kenya, Mali, Rwanda and Uganda, compared to between 68 and 86 per cent in non-slum urban areas.<sup>58</sup>

There are a number of reasons why poor urban women do not seek maternal care. These include poverty and the more pressing demands of other household expenses, other demands on their time given their many

other responsibilities and the absence of supporting infrastructure such as transport and childcare.<sup>59</sup>

Shelter deprivation increases mortality rates for children under five. In Ethiopia, the mortality rate in slums (180 per 1,000 live births) is almost double that in non-slum housing (95). Similar differentials prevail in Guinea, Nigeria, Rwanda and the United Republic of Tanzania. Countries such as the Philippines and Uzbekistan, with much lower levels of child mortality, also show a relationship between shelter deprivation and child survival.

Although poor children born in cities are closer to hospitals and clinics, and their parents are generally better informed, they still die at rates comparable to rural children.<sup>60</sup> Overcrowded and unhealthy living conditions, without adequate water and sanitation, provide a rich breeding ground for respiratory and intestinal diseases and increase mortality among malnourished urban children.<sup>61</sup>

## 9 REPRODUCTIVE HEALTH IN THE SLUMS OF MAHARASHTRA

The number of slum dwellers in India is estimated at 40.3 million in the 2001 census, that is, about 14.2 per cent of the total urban population. A UNFPA project in the State of Maharashtra operates in five municipalities which have experienced rapid growth of urban slum populations.

In remote and inaccessible slum areas, the project upgraded basic emergency obstetric care centres to provide comprehensive services. It is working with women's groups to strengthen women's knowledge and capacities in the area of reproductive health as well as the institutional and community mechanisms to address gender-based violence.

The project also provides spaces for adolescents to discuss their sexual and reproductive health issues in a safe and accepting environment; it fosters improved access to reproductive health information and services; and it provides opportunities for adolescents to build their life skills.

In addition, the project has set up voluntary community-based depots for non-clinical contraceptives. The value of this approach is that it links communities with health institutions, increasing accessibility.

In Kenya's rural areas, almost twice as many infants or children under five years of age die per 1,000 live births compared to Nairobi, the capital city. However, mortality rates are much higher in the capital's informal settlements, where around half of Nairobi's population lives. In Kibera, one of Africa's largest slums, nearly one child in five dies before its fifth birthday. Surveys in many other cities have also shown under-five mortality rates of 100-250 per 1,000 live births in particular settlements.

## HIV/AIDS IN AN URBAN CONTEXT: NEW RISKS, NEW OPPORTUNITIES

In urban settings, the risk and prevalence of HIV/AIDS increases, but the longer-term possibilities of reducing the epidemic appear to be better there. Currently, the situation is bleak. Rural-to-urban migrants leave behind not only partners and family but often customary restrictions on sexual behaviour as well. Cash dependency, coupled with poverty and gender discrimination, may increase transactional sex; at the same time, it reduces opportunities for negotiating safe sex, especially for women and girls but also for younger men and boys. Injecting drug use tends to be higher in urban settings. Sexually transmitted infections and tuberculosis, which increase the acquisition and transmission of HIV, are also more common in urban areas.

Some rural people living with HIV migrate to cities for better treatment and care, including antiretroviral drugs. As a result, HIV prevalence is generally higher in urban than rural populations in sub-Saharan Africa, the epicentre of the AIDS epidemic.<sup>62</sup> Botswana and South Africa both have high urbanization levels and extremely high HIV prevalence.

Urban poverty is linked to HIV transmission and reduces the likelihood of treatment. Street children, orphans, sex workers and poor women in urban areas are particularly vulnerable to HIV infection. Poor urban women are more likely to become victims of sexual violence or human trafficking, increasing their risk; moreover, they are less likely to know how to protect themselves.<sup>63</sup> Women threatened with violence cannot negotiate safe sex.



▲ An activist for the rights of people living with HIV works his beat in the slums of Lagos, Nigeria.

© Ton Koene/Still Pictures

There is, however, some good news. Recent evidence of a downturn in HIV prevalence in urban areas of some countries suggests that urbanization may have the potential to reduce the epidemic. Condoms—key for HIV prevention—and information about HIV transmission may be more readily available in urban areas. Stigma and discrimination may also be lower in urban areas, because of better education and more exposure to people living with HIV/AIDS.

### Social Contradictions in Growing Cities: Dialogue and Discord

#### THE INCREASING SPEED OF CULTURAL CHANGE

Since the 1950s, rapid urbanization has been a catalyst of cultural change. As globalization proceeds, the urban transition is having an enormous impact on ideas, values and beliefs. Such transformations have not been as uniform or seamless as social scientists predicted. The widening gaps

between social groups make inequality more visible. In this atmosphere, large cities can generate creativity and solidarity, but also make conflicts more acute.<sup>64</sup>

Rapidly growing cities, especially the larger ones, include various generations of migrants, each with a diversity of social and cultural backgrounds. Urban life thus exposes new arrivals to an assortment of cultural stimuli and presents them with new choices on a variety of issues, ranging from how their families are organized to what they do with their leisure time. In this sense, urbanization provides opportunities for broad cultural enrichment and is a prime mover of modernization. Through interaction of new urbanites with rural areas, it also accelerates social change across different regions.

At the same time, urbanites may lose contact with traditional norms and values. They may develop new aspirations, but not always the means to realize them. This, in turn, may lead to a sense of deracination and

marginalization, accompanied by crises of identity, feelings of frustration and aggressive behaviour. Many people in developing countries also associate the processes of modernization and globalization with the imposition of Western values on their own cultures and resent them accordingly.<sup>65</sup>

### URBANIZATION AND RELIGIOUS REVIVAL

The revival of religious adherence in its varied forms is one of the more noticeable cultural transformations accompanying urbanization. Rapid urbanization was expected to mean the triumph of rationality, secular values and the demystification of the world, as well as the relegation of religion to a secondary role. Instead, there has been a renewal in religious interest in many countries.

The growth of new religious movements is primarily an urban phenomenon,<sup>66</sup> for example, radical Islam in the Arab region, Pentecostal Christianity in Latin America and parts of Africa and the cult of Shivaji in parts of India. In China, where cities are growing at a breakneck pace, religious movements are fast gaining adherents.

Increased urbanization, coupled with slow economic development and globalization, has helped to increase religious diversity as part of the multiplication of subcultures in cities. Rather than revivals of a tradition, the new religious movements can be seen as adaptations of religion to new circumstances.

Research has tended to focus on extreme religious responses—which have indeed gained numerous followers—hence the tendency to lump them all under the rubric of “fundamentalism”. Yet religious revivalism has varied forms with different impacts, ranging from detached “new age” philosophy to immersion in the political process. Along this continuum, there are many manifestations of religious adherence. Together, they are rapidly changing political dynamics and the social identities of today’s global citizens.<sup>67</sup>

### VIOLENCE AND INSECURITY IN CITIES

Inter-personal violence and insecurity is rising, particularly in urban areas of poorer countries. This exacts an enormous toll on individuals, communities and even nations, and is fast becoming a major security

and public health issue. Violence tends to be greater in faster-growing and larger cities.

The daily living conditions of the urban poor have been strongly correlated with social exclusion and inequality, which tend to be more blatant and resented in cities.<sup>68</sup> They can heighten the potential for the emergence of conflict, crime or violence. The inadequacy of state institutions, particularly police and the justice system, affects the poor most severely. Women are the principal victims, particularly of sexual and domestic violence.

Increased violence is also associated with globalization and structural adjustment, which have aggravated inequality while reducing the capacity of the state to take remedial action. Criminal organizations have taken advantage of open markets to create a global criminal economy, promoting new forms of electronic fraud and international trafficking.<sup>69</sup> Globalization of the illicit drug industry, in particular, has a multiplying effect on violence and criminality.

Violence triggers a wide array of direct and indirect impacts on economic, political and social organization and has a huge impact on development: For instance, if the Latin American region had a crime rate similar to that of the rest of the world, its per capita gross domestic product might be “an astounding 25 per cent higher”.<sup>70</sup>

The organization of urban space is also affected by crime and violence. The affluent middle and upper classes wall themselves in and pay for private security. But the privatization of security itself can be a source of increased violence and disrespect for human rights.<sup>71</sup>

The impacts of crime, robbery, rape and assault on poorer communities are much more severe. The most damaging is perhaps the erosion of social capital—long-standing reciprocal trust among neighbours and community members—which is itself an effective protection against crime.<sup>72</sup>

It is particularly important to note that young people aged 15 to 24 commit the largest number of violent acts and are also the principal victims of violence. The coming “youth bulge” could signal an upsurge in violence unless preventive measures are taken now. Although women are vulnerable, especially to sexual violence and harassment, men are much more likely to become victims

of violent crime (Figure 5). Young men are both the main perpetrators and the main victims of homicides.

As with many of the situations this Report describes, dealing effectively with urban violence calls for a longer-term outlook. The root causes of crime cannot be eliminated overnight. Policymakers must address violence not simply as an issue of social pathology, but as a fundamental constraint on poor people's livelihoods.<sup>73</sup> Altering the trend towards increasing violence calls for effective responses to poverty, inequality and social exclusion.

## The Changing Demographics of Growing Cities

### YOUNG PEOPLE IN YOUNG CITIES<sup>74</sup>

A clear youth bulge marks the demographic profile of cities in developing countries; this bulge is particularly large in slum populations. The individual successes and failures of young people as they ride the wave of urban growth will be decisive for future development since these drastic demographic changes, combined with persistent poverty and unemployment, are a source of conflict in cities across developing countries. Yet political processes rarely reflect the priorities of youth, especially the hundreds of millions of urban children who live in

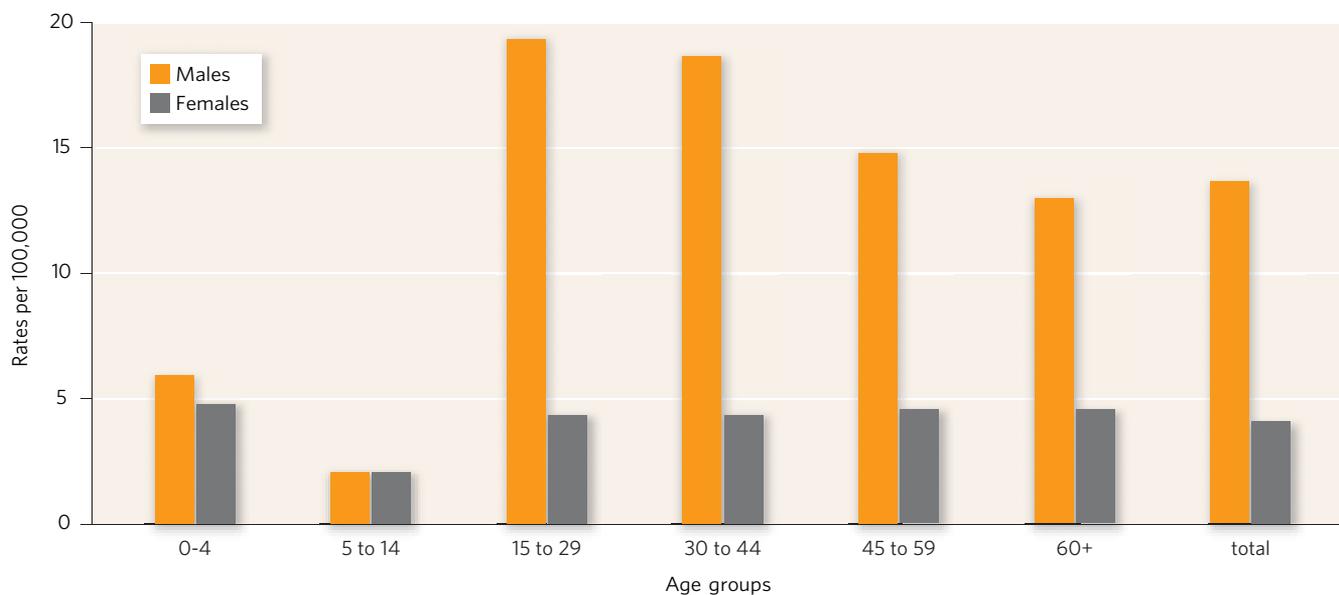
poverty and in conditions that threaten their health, safety, education and prospects.

Young people are typically dynamic, resourceful and receptive to change: But if they are uncared for, unschooled, unguided and unemployed, their energy can turn in destructive, often self-destructive, directions. Investing in urban children and youth, helping them to integrate themselves fully into society, is a matter of human rights and social justice. It is also the key to releasing potential economic benefits and ensuring urban security.

It is estimated that as many as 60 per cent of all urban dwellers will be under the age of 18 by 2030.<sup>75</sup> If urgent measures are not taken in terms of basic services, employment and housing, the youth bulge will grow up in poverty. The number of children born into slums in the developing world is increasing rapidly. Figure 6 shows that slums generally have a much higher proportion of children. The health problems associated with such environments have already been described.

A particular concern is the proliferation of street children and homeless orphans. In villages, the extended family or the community will normally adopt or foster orphaned or homeless children. Urban children and youth who have lost their parents to AIDS lack extended families

**Figure 5: Estimated Global Homicide and Suicide Rates, by Age: World, 2000**



Source: WHO. 2002. *World Report on Violence and Health*. Geneva: WHO.

who could take them in or keep a watchful eye on them. They are vulnerable to abduction and trafficking for sexual purposes. STIs, including HIV/AIDS, and the risk of being involved in or victimized by crime are high among these marginalized groups.

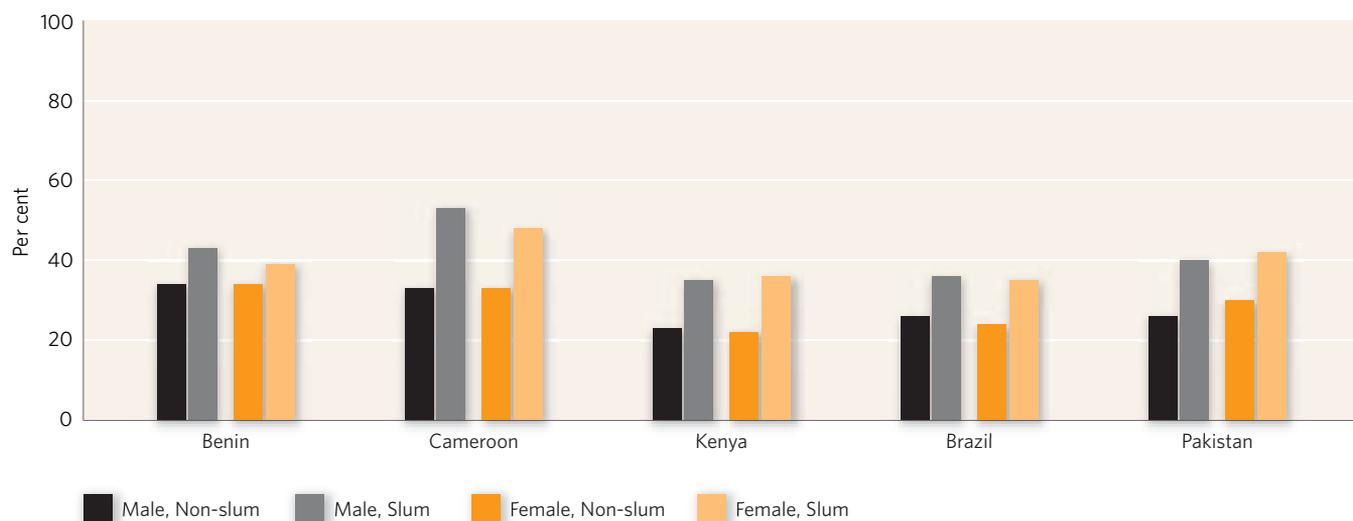
### UNMET NEEDS: EDUCATION, HEALTH AND JOBS FOR THE YOUNG

Young people need literacy, numeracy and an adequate level of formal schooling in order to function in complex urban settings and take full advantage of urban opportunities. School enrolment may be higher in cities because schools are closer to where people live, but again, the poor and, in particular, poor girls, have fewer opportunities. The transition from primary to secondary school is especially problematic since, at this stage, many young people have to start working to help support their families. Girls are often taken out of school to help with household work or to be married off, a practice still prevalent in many cities of sub-Saharan Africa. Schools may refuse to register slum children because their settlements have no official status. Many families cannot afford the indirect costs of “free” education, such as uniforms, textbooks and other supplies. Finally, the quality of education in slum schools is, with few exceptions, significantly inferior, thereby negating the urban advantage.

Not surprisingly, hazards related to the school system are much higher for girls. Factors such as the risks of travel to and from school, inadequate toilet facilities, overcrowding and sexual harassment deter parents from enrolling their daughters in school. Sexual abuse by teachers and other students has been documented in several countries and increases the dropout rates. Such obstacles combine with cultural and social practices that militate against girls’ education and favour child or early marriage. In some countries of sub-Saharan Africa, such as Benin, Côte d’Ivoire, Guinea and Mali, only half the school-age girls are registered in urban schools. In most others, between 20 and 30 per cent of girls living in slums are out of school. Geographically targeted education policies and programmes matter as much as shelter deprivation in increasing girls’ levels of school enrolment. Informal and flexible educational systems are needed in order to accommodate these situations.

Adolescence is the time when most young people initiate sexual activity. Lack of access to sexual and reproductive health information and services can lead to unwanted pregnancies and to unsafe abortions. The fact that young people, even in urban areas, do not have adequate information or services in sexual and reproductive health is a greater cause for concern in the era of the

**Figure 6. Percentage of Male and Female Population, Aged 0-12, by Slum and Non-slum Residence, in Selected Countries**



Source: UN-Habitat. 2007. Urban Indicators Database.

## 10 PROTECTING HEALTH, REDUCING POVERTY

UNFPA Senegal supports a project for adolescent girls, in partnership with the UN Foundation, that combines reproductive health with livelihoods and life-skills activities within the framework of poverty-reduction strategies. UNFPA also supports voluntary HIV testing and counselling services for youth centres in urban areas where young people are more at risk from precocious sexuality, undesired pregnancies and sexually transmitted infections. Prevention activities target populations such as migrants and truck drivers who may put young people at risk.

HIV/AIDS pandemic. About half of all new HIV infections occur among young people aged 15-24, in particular among girls.<sup>76</sup>

Unemployment and underemployment are major concerns for urban youth trying to provide for themselves and their extended families in cities. Young people living in urban poverty are more likely to be married, have at least one child and be heads of household, requiring greater financial resources at an early age.<sup>77</sup> Young women without education are more likely to find only temporary and informal work.

Young men's frustration at being unable to find adequate work, or to construct productive, decent livelihoods, contributes to violent behaviour on the streets or at home. Young unmarried women faced with uncertain financial futures may resort to early marriage or involvement in prostitution to provide for themselves and their children, increasing their risk of sexual violence and exposure to HIV/AIDS.

Programmes offering job-skills training and mentoring and increasing access to capital and microenterprise support can help young people fulfil their economic potential. The ability of cities to absorb young people's labour will be a key determinant in the future success of cities and their people.

Urban life greatly increases the exposure of young people to new technologies, mass media and global culture. The Internet is, in most developing countries, an exclusively urban phenomenon. It could be used

more effectively in training young people and linking them to jobs.

### INVOLVING YOUNG PEOPLE IN DECISIONS THAT AFFECT THEIR LIVES

The importance of involving the young in improving their neighbourhoods is being increasingly recognized. Young people have a right to a voice in matters that concern them. They are also experts on their own environments, well placed to identify not only the problems that confront them but also possible solutions. The Internet has greatly multiplied communication among young people; it could become an important tool in reaching out to them and promoting their effective participation in city governments.

Recognition of the need to involve young people in city governments has spawned such initiatives as the "Child-Friendly Cities" movement (a loose network of city governments committed to involving children in the process of making them better places for children) and the "Growing Up in Cities" programme (that has supported children in low-income urban neighbourhoods all over the world to assess their local environments and to work with local officials to improve them).<sup>78</sup>

### AGEING AND URBANIZATION<sup>79</sup>

The number and proportion of older persons is increasing throughout the world. Urbanization in developing countries will concentrate an increasing proportion of the older population in urban areas. In Africa and Asia, older persons still live predominantly in rural areas, but it is expected that this situation will be reversed before 2020.<sup>80</sup>

Given the context of limited access to social services, high incidence of poverty and low coverage of social security in many countries, this increase in the numbers of older people will challenge the capacity of national and local governments. In principle, urban areas offer more favourable conditions: better health facilities, home-nursing services and recreational facilities, as well as greater access to information and new technologies.<sup>81</sup> Urban areas also favour the rise of associations of older persons, as well as the development of community-based services to support the sick and the frail.

## 11 INVOLVING CHILDREN IN LOCAL GOVERNMENT: THE EXAMPLE OF BARRA MANSA, BRAZIL<sup>1</sup>

In the city of Barra Mansa, more than 6,000 children have been involved in discussions about how to improve their city. They take part in neighbourhood assemblies where they debate pressing issues and elect district delegates who, in turn, elect child councillors. All children aged between 9 and 15 can participate, nominate candidates and vote in the assemblies, but only those who attend school are eligible for election. Such initiatives improve the quality of neighbourhood responses to children's priorities and provide children—both those elected and those who meet to discuss their concerns—with a genuine chance to apprentice in the skills of active citizenship.

However, to benefit from these theoretical advantages, older persons need economic security, strong social support systems, access to good transportation and unimpeded access to urban space free of charge.<sup>82</sup> In most cities of the developing world, these potential advantages are undermined by poverty and by physical or institutional restrictions. Moreover, older persons are often invisible, “lost” among other priorities. Urbanization tends to erode traditional sociocultural norms and values and the social networks and family support structures favouring the support of older persons by communities and families.

Three main areas need to be addressed: helping older persons to preserve their autonomy and independent living for as long as possible; providing health and other social services, including long-term care; and assuring higher levels of economic security through social protection systems for those who are more socially and economically vulnerable.

Particular attention must be given to the situation of women who are less likely to have lifetime earnings or full-time employment and who tend to live longer, thus losing spousal support. They are more likely to have worked in the informal sector and thus are not entitled to pensions and social security nor to have accumulated savings. Moreover, given the lack of state protection, the

burden of care is likely to rest entirely on the shoulders of women and girls.

The data needed to analyse and monitor these issues have to be improved and updated, including mapping the situation of older persons and their social and spatial segregation.<sup>83</sup> In order to maximize the development benefits of urbanization for older persons while minimizing its possible negative impacts, new approaches will be needed. Box 12 offers a case example of tackling the issues of ageing populations in Asia.

### Improving Urban Governance and Involving the Poor: *The Right Thing to Do*

This chapter has highlighted some of the potentialities and the contrasting realities of the cities. Specifically, it discussed many of the problems faced by the rapidly growing population of urban poor. Large gaps between the access of poor and better-off urban residents to what the city has to offer can be observed with respect to gender, child mortality, reproductive health, education, income, housing and security. The conclusions are that the rights of the poor to the city and to its benefits are often severely restricted and that the advantages of the urban poor over rural populations are surprisingly small in many developing countries.

This is disappointing: Urban economies of scale and proximity should translate into access to better services for all urban dwellers. Extending services to poorer neighbourhoods costs much less than reaching the same numbers of people in remote and scattered rural settlements.<sup>84</sup> It thus stands to reason that much of the discrepancy between potential and reality has to do with urban management.

How can these patterns be improved? What would it take? This Report stresses that accepting the inevitability and potential advantages of urban growth is a crucial starting point. Unfortunately, prohibitionist approaches still prevail in managing urban and slum expansion. Many politicians and planners regard slum formation as temporary: the less intervention, the better.<sup>85</sup>

Instilling among leaders a more positive approach to urban growth and to slum dwellers calls for advocacy concerning the benefits of preparing effectively for urban

growth. Ultimately, political commitment to feasible solutions is essential; that issue will be discussed in the next chapter. Policymakers and civil society both need solid information on who the poor are, how their numbers are expanding, where they live, what their needs are and what the obstacles are to accessing what the city has to offer. Chapter 6 looks at this aspect in some detail.

Another critical strategy in efforts to reduce poverty and fulfil the rights of individuals is to involve people in shaping the policies and programmes that affect their lives. The benefits of participation have been widely acknowledged and encouraged in national poverty reduction strategies, as well as in local-level approaches. Although involving this large and growing population in development processes would seem an obvious necessity, anti-urban prejudices in many cities still prevent it.<sup>86</sup>

In response to day-to-day realities, the urban poor themselves have set up formidable groups, associations and federations. Large or small, Organizations of the Urban Poor (OUPs) have come together to identify the social and economic conditions that they face; to find practical solutions to these problems; to struggle against marginalization; and to ensure access to the goods and services to which they are entitled. They have had success on a variety of fronts: slum upgrading, impeding relocations and evictions, providing affordable housing and infrastructure and building capacities for the stable livelihoods of their members.<sup>87</sup>

▼ *Holding their brooms aloft and singing as they walk together, an army of community volunteers meets every week to sweep and clear the rubbish off the streets in a sprawling shack settlement of half a million people on the sandy flats off Cape Town, South Africa.*

© Gideon Mendel/Corbis



A few illustrative cases demonstrate this. The South African Homeless People's Federation and the People's Dialogue on Land and Shelter boast a combined membership of over 80,000 households. Through their community groups, the organizations work on local mapping and data gathering for planning; savings and credit schemes; acquisition of housing and land; income generation; and empowerment of individuals through networking and exchange.<sup>88</sup>

In approximately 80 cities around Afghanistan, community groups, mostly women-led, were providing education, health and business services even during the challenging times of Taliban rule. Today, UN-Habitat is working to fold such community initiatives into the development and infrastructure rebuilding process.<sup>89</sup> In the Philippines, a federation of neighbourhood organizations (*ZOTO*) led a successful effort to secure title and leasehold rights and community upgrading from the Philippine Government, in an area of Manila that had been slated for land conversion and the displacement of the masses of urban poor residing there. This effort, along with others, has brought new laws which make forced evictions nearly impossible without consultation of those affected and which assure relocation in properly serviced areas.<sup>90</sup>

Many OUPs eventually have an impact on the policies and practices of governments. In Pune, India, nearly 2 million inhabitants were supplied with public toilet blocks by the local Government. This was the result of a concept pioneered jointly by the Society for the Promotion of Area Resource Centres and by the National Slum Dwellers Federation, *Mahila Milan*—a network of savings and credit groups formed by women.<sup>91</sup> In Thailand, more than 1,000 organizations

and community groups are linked into a national project to make locally based improvements to the urban environment in poor areas.<sup>92</sup> And in several Brazilian cities, participatory planning and budgeting has allocated a greater portion of the municipal investment budget to priorities determined by neighbourhoods and community groups.<sup>93</sup>

In other instances, small groups have grown into larger national federations and even into international



Older people line up for soup in Hangzhou, China. ▶

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By 2050, fully 24 per cent of China's population will be 65 and over, compared with 8 per cent today; seven per cent will be 80 and over, compared with 1 per cent today. People live longer and have fewer children today, largely because technology allows them to do so. But there is no easy technological answer to the sudden arrival of large numbers of elderly people. Population ageing is happening fast in developing countries; ingenuity will be needed to meet its challenges.

Ageing in Asia is increasingly an urban phenomenon. The tradition that children support their parents in old age survives, but many young people have left the countryside for the city. A growing number of elderly people are following them, in search of a way to live. They do not always find it: In China, the city of Wei Hai is building homes for some 10,000 "abandoned elderly" who have no direct family support.

Adapting for an ageing future requires organizational ingenuity. In Chennai, India, for example, where the total ferti-

ty rate has already fallen to below replacement level, the city is closing 10 maternity clinics, retraining staff and reopening them as geriatric units.

Organizational change is also part of the response in East and South-East Asia, where ageing is already more advanced. Wei Hai is proposing itself as the site for a pilot programme in which the national family planning board's mandate will be extended to include the aged. Such creative reorganization will be necessary to prepare for the challenge of urban ageing.

networks.<sup>94</sup> Shack/Slum Dweller's International, possibly the largest of such international movements, and the Huairou Commission (see Box 8) are two examples of how networked organizations have been effective in raising the profile of issues important to the urban poor.<sup>95</sup> Their pressure has influenced the international agenda in areas such as housing rights, protection against evictions, women's rights and the responsibilities of government and civil society with regard to the plight of the urban poor.<sup>96</sup>

In such ways over the years, their creativity and lively action have demonstrated that OUPs are capable and motivated to take responsibility for their needs and to claim their rights to living a dignified and quality life. The UN Millennium Project's Task Force on slums recommended that governments "acknowledge the organizations of the urban poor wherever they exist and to work with their strategies".<sup>97</sup> Civil society participation and the country-driven approach are among the World Bank's core principles in the poverty reduction strategy process.<sup>98</sup>

With proper governmental support these organizations can make an even greater impact in attacking material poverty, in harnessing their rights as citizens and city dwellers and in building their own capacities as active agents of change. Governments only stand to gain, since the inclusion of OUPs in city management increases its effectiveness. Needs and demands are better

identified, while responsiveness and efficiency in urban service delivery are enhanced. Such collaboration also improves learning and understanding by combining technical expertise with local knowledge. Empowering civil society deepens democracy.<sup>99</sup>



## 3

# Rethinking Policy on Urban Poverty

*“Running the poor out of town” through evictions or discriminatory practices is not the answer. Helping the urban poor to integrate into the fabric of urban society is the only long-lasting and sustainable solution to the growing urbanization of poverty.<sup>1</sup>*

## Wrong Way Streets and New Avenues<sup>2</sup>

To meet the needs of burgeoning urban populations, stimulate both urban and rural development and achieve the Millennium Development Goals (MDGs), planners and policymakers should reconsider their bias against urban growth. It is ineffective and often counter-productive. Moreover, it stands in the way of initiatives to reduce poverty.

There is clear evidence that urbanization can play a positive role in social and economic development. Historically, the statistical association between urbanization and economic growth has been strong.<sup>3</sup> Today, cities generally have greater potential than rural areas for reducing poverty. Cities are the main site of economic growth in most countries and account for a disproportionately high share of national economic production:<sup>4</sup> “Countries that are highly urbanized tend to have higher incomes, more stable economies, stronger institutions and are better able to withstand the volatility of the global economy.”<sup>5</sup>

Proximity and concentration give cities the advantage in the production of goods and services by reducing costs, supporting innovation and fostering synergies among different economic sectors. But proximity and concentration also have the potential to improve people’s lives directly and at lower cost than rural areas: For instance, cities can provide much cheaper access to basic infrastructure and services to their entire populations. As a result, urban poverty rates are, overall, lower than those in rural areas; the transfer of population from rural to urban areas actually helps to reduce national poverty rates (see Box 13).

People intuitively perceive the advantages of urban life. This explains why millions flock to the cities every year. Yet many planners and policymakers in rapidly urbanizing nations want to prevent urban growth.<sup>6</sup> Such attitudes are not founded on evidence: They also have negative consequences for poverty reduction. The right to the city, proposed by a Task Force in the United Nations Millennium Project,<sup>7</sup> remains elusive in the face of policymakers’ prejudice against expanding it.<sup>8</sup>

◀ *Though he is unable to send them all to school, a man reads the newspaper to his children on the pavement outside his hut in Kolkata, India.*

© Shehzad Noorani/Still Pictures

### 13 THE ROLE OF URBANIZATION IN POVERTY REDUCTION<sup>1</sup>

It is commonly assumed that rural-to-urban migration merely redistributes poverty from the countryside to the cities. Yet, social mobility commonly accompanies migration, and poverty rates have been declining in both the rural and urban areas of many countries. A study at UNFPA attempted to look at urbanization's role in these changes. It broke down the improvements in national poverty rates into three components: the decline of rural poverty, the decline of urban poverty and the rising proportion of the population living in urban areas, where poverty rates are lower.

This procedure, applied in 25 countries, covering different regions and periods, provides a rough indication of urbanization's possible importance in the overall process of poverty reduction. According to this approach, the urbanization effect until the 1990s seems to have been fairly unimportant. Since then, however, the transfer of population from rural to urban areas would have accounted for about 10 per cent of national poverty reduction, on average.

In Bolivia, urbanization accounted for 28.3 per cent of the 1.2 per cent reduction in the national poverty level during the 1999-2005 period; 17.0 per cent of Brazil's

5.1 per cent poverty reduction between 1999 and 2004 was similarly due to urbanization. In Nicaragua, urban and rural poverty levels hardly changed at all between 1998 and 2001; yet the *national* poverty level fell over half a percentage point as the result of urbanization.

Although this descriptive exercise does not provide conclusive evidence as to whether urbanization has an independent role in promoting poverty reduction, it does suggest that, given the right conditions, it can be a dynamic component of the national poverty reduction process, rather than being a mere escape valve for rural poverty.

The reluctance of policymakers to accept urbanization has been a barrier against the flow of advances promoted by urban social movements. In recent years, local Organizations of the Urban Poor (OUPs) and non-governmental organizations (NGOs) have made remarkable headway in collective efforts to improve housing, infrastructure and services, greatly alleviating and reducing urban poverty.<sup>9</sup> Their efforts are being increasingly recognized: The 2006 Habitat Conference was, in many ways, a celebration of their success.

Yet local communities have often had to overcome obstacles put up by local and national authorities, when a more supportive approach could have made a crucial difference. To help urbanization move in the right direction, policymakers need to revise the assumptions that underlie their anti-urban bias.<sup>10</sup> They should be able not only to move with the flow but also to direct it towards improving the urban habitat and reducing poverty. The present chapter illustrates this point with regard to an issue that is critical for urban poverty reduction—the shelter needs of the poor.

#### Trying to Keep the Masses Out: A Failed Strategy

National governments have tried two strategies to restrict the rapid expansion of urban settlements for the poor:

a) ambitious schemes to retain people in rural areas or to colonize new agricultural zones; and b) regulating urban land use, backed up either by evictions or, more frequently, by denying essential services such as water and sanitation.<sup>11</sup>

In doing this, policymakers implicitly reason that slum dwellers should not have moved to the city in the first place, and that assisting slum dwellers contributes to over-urbanization. Consequently, they attempt to make cities less attractive for potential migrants.

Since most poor people in low-income nations still live in rural areas, it seems intuitively sensible to keep rural-urban migration down to a level consistent with the availability of urban jobs and services. In many cities around the world, the more lively debate in the corridors of power has been not over how best to assist the urban poor, but over how to prevent them from arriving, settling or remaining.

However, the arguments that portray excessive rural-urban migration as a cause of urban poverty are typically based on a number of misconceptions:

- *Rural-urban migrants are primarily responsible for urban poverty.* The main component of urban growth in most nations is not migration but natural increase (that is, more births than deaths), as noted in Chapter 1.

Migrants are generally *not* more concentrated among the poor.<sup>12</sup> In addition, many residents of poor settlements are not rural-urban migrants, but poor people displaced from other parts of the city.

- *Focusing on urban poverty can detract attention from rural development.* Treating “rural” and “urban” poverty as somehow separate and in competition with each other for resources is not only a conceptual mistake, but a remarkably short-sighted view of the problem. In fact, successful rural development generally stimulates and supports urban development, and vice versa.<sup>13</sup> In addition, successful rural development may actually generate more rural-urban migration. Conversely, urban growth is a powerful stimulus to food production, especially by small farmers. Access to flourishing urban markets contributes both to the reduction of rural poverty and to urban food security.
- *Population growth in cities is what causes slums.* It is true that city growth is often accompanied by the rapid expansion of unplanned and underserved neighbourhoods with high concentrations of poor people; but this is largely the result of lack of attention to the needs of the poor—a matter of vision and governance (see next section).
- *The poor are a drain on the urban economy.* On the contrary, the urban poor are essential to the economy of cities and to national development. Many certainly work in the informal sector. But the informal sector is not just a messy mix of marginalized activities, as it tends to be viewed; much of it is competitive and highly dynamic, well integrated into the urban economy and even into the global economy. The informal sector accounts for as much as two thirds of urban employment in many countries of sub-Saharan Africa and plays a crucial role in urban households’ responses to crisis. It is also a main source of employment and income for poor urban women.
- *Migrants would be better off remaining in rural areas.* When migrants move to urban centres, they are making rational choices. Even if urban working and living

conditions present many serious difficulties, they are perceived as preferable to the rural alternatives—otherwise migrants would not keep coming. Measures to curb migration can easily make both rural and urban poverty worse, not better.

- *Anti-migration policies can limit urban growth.* There is little evidence that restrictive planning regulations or poor conditions in urban areas have appreciably reduced rural-urban migration. By making conditions worse, they have made it more difficult for the urban poor to climb out of poverty and held back positive efforts to prepare for urban growth.

In short, mobility is a strategy that households and individuals adopt to improve their lives and to reduce risk and vulnerability. Additionally, in many regions, people are forced to leave rural areas: Population growth and environmental change have depleted the natural resource base and its capacity to support local residents. Moreover, insecurity due to civil strife also compels many rural people to flee to the cities or their environs.<sup>14</sup> Thus, for many, moving to the cities is not only rational but sometimes the only way to survive.

Despite many serious and continuing difficulties, urbanization clearly improves lives, in the aggregate. Migrants and the urban poor also contribute to urban and national economic growth. Policies should recognize mobility’s role in development and poverty reduction. The real issue is not that cities grow fast, but that they are unprepared to absorb urban growth.

Direct controls on rural-urban migration can also increase rural poverty by reducing transfers of money and goods to rural households from migrant relatives. In most low-income nations, remittances and earnings from urban-based non-farm activities constitute a growing proportion of income for rural households. Such interaction between rural and urban areas is likely to increase over time and should be supported.<sup>15</sup> Poor households that manage to diversify their income sources in different locations and economic sectors are generally less vulnerable to sudden shocks and may be able to move out of poverty.

Attempts to control rural-urban migration infringe individual rights and hold back overall development. They are difficult to enforce and usually ineffective. Not surprisingly, they have had a long history of failure, as Box 14 illustrates.

Finally, laissez-faire attitudes and wishful thinking about urban growth are equally detrimental. Presuming that further growth will not materialize because things are going badly is, to say the least, imprudent:

“... Urban growth and expansion is ubiquitous. Cities that experience population and economic growth inevitably experience urban expansion too. This in itself is an important finding, because it is quite common to hear of urban planners and decision makers speaking of their cities as exceptions to the rule, asserting that other cities will grow and expand and their city will not, simply because it is already bursting at the seams, and because they think that further growth is objectionable.”<sup>16</sup>

#### 14 THE FUTILITY OF TRYING TO PREVENT RURAL-URBAN MIGRATION

The history of attempts to control rural-urban migratory flows is couched in frustration. Most centrally planned economies attempted it, particularly by limiting migration to the capital city, with little or no effect.<sup>1</sup> Many post-colonial governments have inherited the draconian measures of colonial regimes to prevent urban growth. Efforts to redirect migration flows and to stanch urban concentration often reflect technocrats' lack of understanding of why migrants move. Explicit government policies systematically attempt to promote de-concentration. By contrast, their implicit and unintended policies, which generally conform to market forces, almost invariably strengthen concentration.<sup>2</sup>

This has led to the observation that: “... [S]ocieties that allow the free movement of people within their borders are likely to see a reduction of poverty in rural areas. Those that attempt to control migration, or limit or reverse movements to towns and cities, are likely to see little change or a deterioration in conditions. For example, internal movements of population were tightly controlled in both China and Viet Nam until the reforms from 1978 and 1986, respectively. Poverty in both these countries has dropped sharply over the subsequent decades.”<sup>3</sup>

### Addressing the Shelter Needs of the Poor

Once policymakers accept the inevitability of urban growth, they are in position to help meet the needs of the poor. One of the most critical areas is shelter. As UN-Habitat has made eminently clear over the years, the many difficulties faced by the urban poor are linked, to a greater or lesser extent, to the quality, location and security of housing.

Overcrowding, inadequate infrastructure and services, insecurity of tenure, risks from natural and human-made hazards, exclusion from the exercise of citizenship and distance from employment and income-earning opportunities are all linked together. *Shelter is at the core of urban poverty: Much can be done to improve the lives of people through better policies in this area.* Initiatives in this domain are particularly beneficial for poor women who are often burdened with triple responsibilities in child rearing, management of the household, and income earning.

A roof and an address in a habitable neighbourhood is a vital starting point for poor urban people, from which they can tap into what the city can offer them by way of jobs, income, infrastructure, services and amenities. Decent shelter provides people a home; security for their belongings; safety for their families; a place to strengthen their social relations and networks; a place for local trading and service provision; and a means to access basic services. It is the first step to a better life. For women, property and shelter are particularly significant in terms of poverty, HIV/AIDS, migration and violence.

If inadequate shelter is at the root of urban poverty, the persistent reluctance of policymakers to accept urban growth leaves the poor to fend for themselves in disorganized and merciless land and housing markets. Powerless, the poor are forced to live in uninhabitable or insecure areas, where even minimal services such as water and basic sanitation are unlikely to materialize.

With the boundless ingenuity and resourcefulness that humans demonstrate across the globe, millions of people in developing countries live in “self-help housing”. Large segments of the urban poor are able to obtain access to land and housing only through invading land being held by speculators or by settling in locales not highly valued by land markets, such as steep hillsides,

riverbanks subject to flooding, fragile ecosystems, water catchment areas or sites near industrial hazards.

Such squatter settlements are often illegal but generally represent the only option open to poor people, migrant or native, in search of shelter. Illegality and insecurity of tenure often inhibit people from making substantial improvements to their homes or from banding together to upgrade their neighbourhood. Secure tenure would stimulate the local economy because it encourages people to invest in improving their homes.

Governments will generally not help areas where land rights are unclear, so these informal settlements are rarely provided with water, sanitation, transport, electricity or basic social services. The resulting pattern of occupation is frequently haphazard and asymmetrical.

When slum dwellers try to improve their conditions, or when local governments finally try to provide them with minimal services, the economic costs can become impracticable.<sup>17</sup> Just putting in a road or providing channels for water or sewage requires tearing down existing construction. Lack of planning, inadequate location, the lack of access roads and the sheer accumulation of miserable conditions make it more difficult to retrofit poor neighbourhoods with water, sanitation, electricity, access roads and waste management. Meanwhile, the mere expectation that the attempt will be made pushes up land prices, encourages speculation and increases insecurity.

Improving access to land and housing for the growing masses of urban poor calls for a more proactive attitude. There is greater recognition of people's rights to housing; but decision makers' largely negative stance towards urban growth still prevents them from dealing effectively with the shelter needs of the poor. In several countries, women face additional difficulties in exercising their rights to shelter because national laws prevent them from legally owning property.



▲ Social worker helps a young polio victim in Addis Ababa, Ethiopia.  
© Sean Sprague/Still Pictures

## A Quantum Leap: Meeting a New Scenario for Shelter

*Governments should strengthen their capacities to respond to the pressures caused by rapid urbanization . . . . Particular attention should be paid to land management in order to ensure economical land use, protect fragile ecosystems and facilitate the access of the poor to land in both urban and rural areas.<sup>18</sup>*

How can national and international institutions help to create a liveable urban future for the masses of urban poor, as the International Conference on Population and Development (ICPD) recommended? Here it is necessary to distinguish between approaches aimed at meeting the needs of the urban poor *currently* living in cities and those aimed at relieving the pressures caused by large *future* growth.

Ongoing discussions focus primarily on the *current* situation of existing slums, their internal organization, their struggles to resist eviction and to improve urban services. The role of local organizations in the improvement of urban living conditions for the poor is being increasingly recognized. OUPs have been responsible for local empowerment, and for changes in the decision-making processes that will have a lasting impact on urban planning and governance.<sup>19</sup>

However, current shelter needs are, in the face of coming growth, merely the tip of the iceberg in many countries. It is expected that Africa and Asia alone will add 1.7 billion new urban dwellers between 2000 and 2030. Many of these new urban dwellers, whether migrants or natives, are poor (see Box 15).

Planning for *future* rapid expansion of shelter needs in towns and cities, while at the same time addressing the accumulated demand of the past, calls for a critical change in the approach of municipal and national governments. They will have to mobilize their technical and political resources for, rather than against, the land, housing and service requirements of the urban poor. They will also need to consult and utilize the experience and local knowledge of OUPs, many of which are part of currently successful approaches.

Dealing with the rapid doubling of the urban population in developing countries requires vision and a more

effective approach. To have a chance to improve their lives, the poor need access to affordable and serviced land on which to build their homes and reach other services. With that as the cornerstone, they can start to build the rest of their lives. Thus, a critical initiative for the medium and long term is to provide access to shelter through proactive policies with regard to land ownership, regulations, financing and service delivery.

One strategy would be to focus on providing *access to serviced land* for the growing millions. Hard realism must permeate this vision. Governments of rapidly urbanizing countries are simply unable to provide housing and desirable urban services for most of their current urban poor. They will hardly be able to cater to the needs of a rapidly growing number of additional urbanites. It is even more unrealistic to imagine that these new urbanites will be able to compete successfully in what are sure to be aggressive real estate markets.

Under these conditions, providing minimally serviced land goes to the heart of the matter. The object would be to offer poor people a piece of land accessible by wheeled transport (from buses to bicycles) with easily-made connections to, at least, water, sanitation, waste disposal and electricity.

This first lodging will often be a simple shack, made of whatever scraps are available. But it will probably improve: The history of informal settlements teaches us that, if poor people feel secure about their tenure, and have reasonable access to livelihoods and services, they will improve their own dwellings over time.

Investing in their own homes is a means for families to build up their most valuable asset—one that can be drawn on in emergencies. With the help of neighbours and the support of government and non-governmental organizations, they can improve basic services.

Providing poor people with minimally serviced land is not an easy solution: Given the voracity of the economic interests involved, the murkiness of titles in many developing cities, and the uncanny ability of informal land markets to turn a profit by exploiting the poor, dealing in land use is always fraught with difficulties. Not only the intended beneficiaries, but local and national governments generally have very limited resources.

## 15 HOW MANY OF THE NEW URBANITES ARE POOR?

The proportion of the growing urban population in developing countries that is poor or very poor varies greatly and cannot be easily measured. Nevertheless, even rough simulations suggest that this proportion is high.

The three components of urban growth are migration, natural increase and reclassification of rural areas as urban. Natural increase is universally higher among poor people, whether they are migrants or natives. The poverty levels of migrants are generally intermediate between those of urban and rural areas. People living in rural areas that are reclassified as urban can also be assumed to have poverty levels that are somewhere between rural and urban levels.

In the case of Brazil, it has been estimated that 69 per cent of migrants to urban areas and of rural people reclassified as urban (between 1999 and 2004) can be categorized as “poor”. In the same period, 48 per cent of urban natural increase can be attributable to poor people.<sup>1</sup> In this case, it can thus be safely assumed that poor people would, at a very conservative estimate, make up more than half of all new urbanites. Countries with higher levels of poverty would logically have even higher proportions of their new urbanites made up of poor people.

Moreover, governments generally have little appetite for the tough political decisions that the issue requires.

Although it is much less ambitious than the traditional but inevitably doomed approach of providing built-up and fully serviced housing, making minimally serviced land available still presents technical and political difficulties. It requires a radical change in approaches to urban land planning and a revolution in the mindset of politicians and planners.

### Regulating Urban Land Markets: Mission Impossible?

*There is no lack of land. The problem is dysfunctional land markets, misguided regulations and a lack of pro-active management policies.<sup>20</sup>*

The main *technical* difficulties involved in providing land for the urban poor concern: a) locating and acquiring enough buildable land; b) devising sustainable ways of financing its transfer to the poor; and c) regulating the functioning of land markets.

An alleged shortage of land has been a main obstacle to more effective housing policies for the poor. The need to safeguard environmental and agricultural land from chaotic urban expansion is a genuine concern. However, most cities still have buildable land in good locations, but it is owned or controlled by private interests or by state agencies with no interest in socially directed uses of the land. The real shortage is thus not of land, but of serviced land at affordable prices.

Meeting the land needs of the poor is easier in the context of well-regulated land and housing markets. Not only do effective markets make more land available to the poor, but they also favour economic growth.

Lack of good regulation actually increases poverty: Metre for metre, people in informal settlements pay more for land and services than people in wealthier residential areas.<sup>21</sup> Unregulated markets also make it difficult for governmental bodies to collect property taxes or reduce land speculation and to build up resources on this basis for socially oriented planning of land use (see Box 16).

Financing socially oriented housing has always been difficult, but there is no shortage of innovative proposals, once past the hurdle of anti-urban bias. Given regularized land markets, the support of local governments, NGOs

## 16 LAND FOR THE POOR IN THE FACE OF RAPID URBAN GROWTH<sup>1</sup>

The problem is not so much the shortage of land or the number of poor urbanites, but rather their restricted access to serviced land and housing because of distorted land markets.

Servicing already settled areas costs more than providing serviced land on unoccupied sites. Yet public authorities, pleading insufficient funds, seem to find smaller investments in *ex post facto* programmes more appealing than well-planned proactive policies. Much could be done to improve the situation, for instance, by enacting special legislation for the provision of adequately serviced land for low-income groups. Cities could finance urban development by taxing increases in land value resulting either from public investment in local urban infrastructure or services, or from the redefinition of land uses towards more profitable ones, such as changes from rural to urban or from residential to commercial uses.

The urban poor tend to be treated as if they were passive in the production and consumption of land, yet they have some capacity to pay for land, despite their low and unstable incomes. Indeed, the poor already pay very high prices for the housing they find through the informal market. This capacity to pay could be better mobilized through formal regulation and provision of plots of land.

Scarcity of land or financial resources is thus not the only obstacle to the implementation of sustainable policies. In a sense, poor people have to be protected from the abusive practices of developers who capitalize on services provided by the local communities or by the public sector. Political will, as well as managerial and technical capacities, are needed to identify, capture and properly invest available resources—including the resources of poor people themselves—into more equitable urban development.

and international funding agencies could be marshalled towards a more proactive approach.

International and multilateral agencies could make a difference. New rules for the United Nations system, promulgated by the Secretary-General in August 2006, will enable the UN to address this structural shortcoming and provide more effective support on affordable housing finance. That support will include pro-poor mortgage financing systems, now being tested in the field, as an alternative to conventional social housing policies.<sup>22</sup>

Particular attention will have to be given to the gender constraints that exist in formal credit channels precluding women from tapping into this market. Access to microfinance has proven to buttress women's empowerment and helps to reduce urban poverty.

### Advocacy, Votes and Action: The Need for Leadership

These initiatives call for a new awareness and an unprecedented level of political support at the local and national level. Most politicians are, at the best of times, unwilling to confront the power of the urban real estate market. The added complexity of attending to the land needs of the poor, as described above, is even less enticing. A critical initiative, without which most efforts will fail, is to regulate increments in land value. In other words, it is necessary to introduce fiscal measures that prevent speculators and developers from hiking up the price of land and services unreasonably as soon as socially motivated land allocation is proposed.

This is unlikely to be a popular approach for current urban power structures. Political reluctance is magnified by the time lag between proposed action and any possible political return: Expenditure of political capital and financial investment are required immediately, but the political advantage and economic benefits will be reaped far in the future.<sup>23</sup>

These complexities help explain why medium- and long-term land use planning has traditionally not been high among government or donor priorities. Nevertheless, the needs of the growing masses cannot simply be ignored. In particular, the legal, social and cultural barriers that women face in accessing land have to be explicitly considered. Not only political will and viable technical solutions, but coordinated policy support from donors and other actors are needed.

Generating political will begins with the recognition that poor people are often the majority in urban population growth. It also demands that leaders and policymakers accept the inevitability of urban growth, and treat the poor as true urban citizens who have a clear right to the city and to decent housing. The perception that the poor are not true urban citizens<sup>24</sup> undermines the sort of collective negotiations over land use, standards, public

services and environment that can effectively address the most critical urban challenges. It also undercuts whatever motivation politicians might have to deal with them.

Creating awareness among policymakers and planners, given the traditional aversion to urbanization and urban growth, will require solid, evidence-based advocacy. Multidisciplinary approaches and broad-based international support can help turn the tide by promoting clear, factual and convincing evidence of ongoing changes and the needs they generate.

Population specialists, in particular, can help to generate and promote key lessons through data, analyses and concrete examples, including: a) the inevitability and real advantages of urbanization and urban growth; b) the futility of anti-urban biases and policies; c) the increasing share of national poverty, disaggregated by gender, in urban areas; d) the effectiveness of proactive approaches to deal with the needs of poor men and women in cities; and e) the importance of involving the poor in decisions that affect their habitat.

### Adding a Dose of Realism

Finally, a large degree of pragmatism has to accompany initiatives such as the allocation of minimally serviced plots to poor people. Well-intentioned proposals will not put an end to the occasional savageries of the marketplace or the vagaries of the democratic system. The distribution of minimally serviced land can be, and has repeatedly been, used for less noble purposes than meeting the needs of the poor.

Controlling the abusive practices of developers and service providers who use socially motivated land repartition schemes to increase their own profits is a very real challenge. Subsidies can simply increase the price of land. The international record of land banking is admittedly poor. Successful pilot projects often flounder when brought up to scale.

Less important, people who are not poor will worm their way into any distribution scheme to make a profit. Some beneficiaries will move on as soon as their property acquires exchange or monetary value—though this is not necessarily negative, since it becomes a form of social mobility. Distribution of publicly owned or appropriated

land can fall victim to unscrupulous economic or political schemes. They can even increase the social and geographic distances between the haves and have-nots.<sup>25</sup>

The possibility that they may be exploited for economic or political gain should not impede socially motivated approaches to serviced land. Other social and political forces, supported by better information and improved communication, will have to come into play to denounce deceitful and ruthless manoeuvres that can stand in the way of improvement in the lives of the poor.<sup>26</sup>

### Preparing for the Future

*Slum formation is neither inevitable nor acceptable.*<sup>27</sup>

Most of the world's population growth in the foreseeable future will be in the urban centres of low- and middle-income nations. Success in reducing poverty, gender inequality and meeting other MDGs will depend on good urban policies and practices.

Recent initiatives encourage prospects for a more proactive approach to urban growth, and especially to the needs of the urban poor. For instance, the World Bank recently commissioned a study of the dynamics of global urban expansion in order to help the governments of developing countries prepare for upcoming and massive urban population growth.<sup>28</sup> This work did not focus specifically on the land-use needs of the poor but on urban expansion in general, emphasizing the need to make realistic plans for inevitable growth.<sup>29</sup> A practical application of this approach is shown in Box 17.

This chapter has argued that taking such proactive stances will require a change in mentality as well as in approach. Rather than debating how fast urban centres ought to grow, urban governments (and others) should plan to accommodate expected growth as efficiently and equitably as possible. Rather than setting standards to reflect what ought to be, they should negotiate standards with local residents that reflect what can be achieved. Rather than devising land-use regulations to curb urban growth, they should use regulations to help secure locations suitable for low-income housing.

Urban and national planners cannot achieve any of this alone. They need to be aware of the needs, open to the possibilities and support locally driven efforts to meet

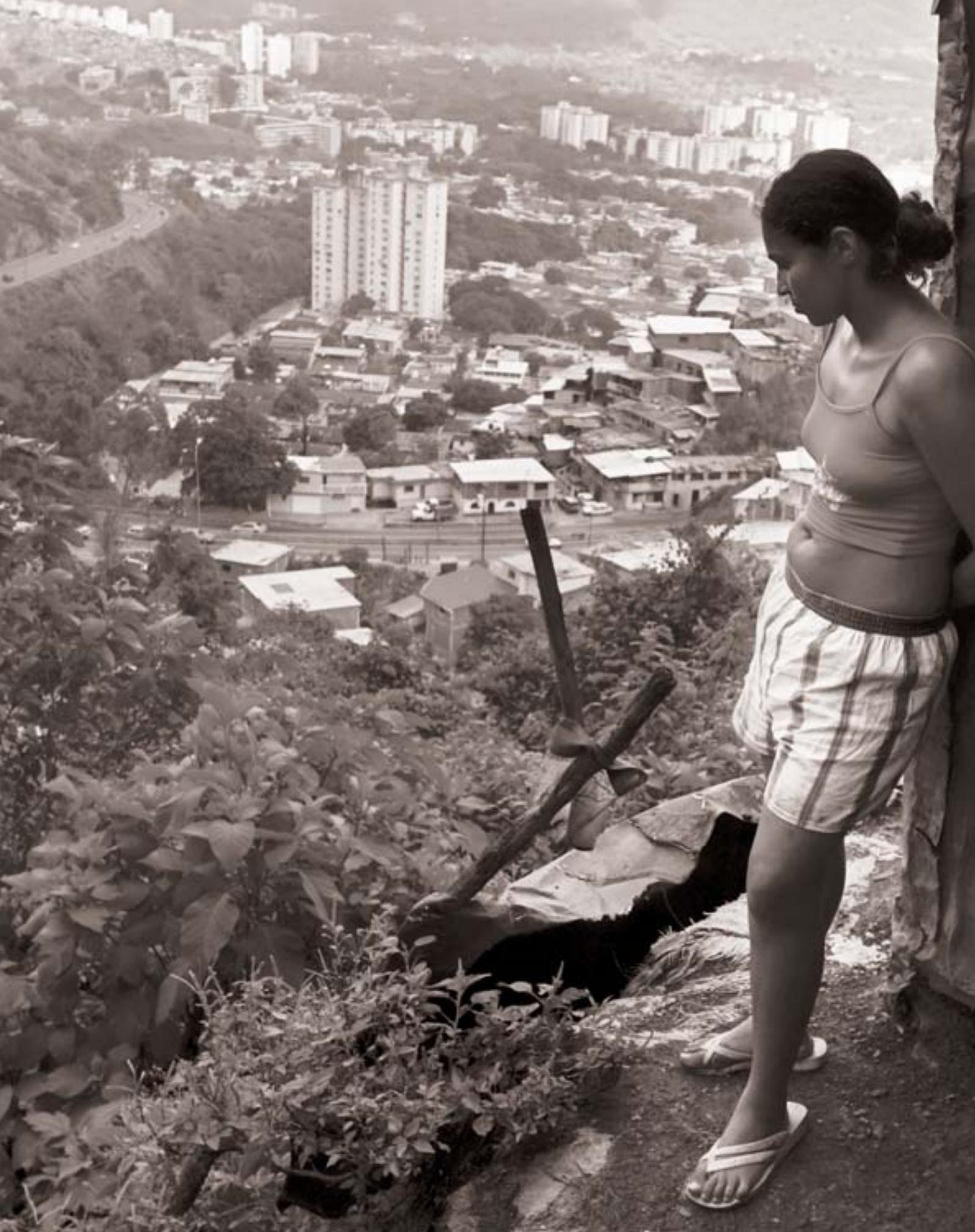
### 17 PREPARING FOR URBAN EXPANSION IN INTERMEDIATE CITIES IN ECUADOR<sup>1</sup>

A World Bank project aimed at improving living conditions for the urban poor in Ecuador focused attention on meeting future housing needs in five intermediate cities. All five are expected to double in population in the next 15-30 years and to triple or more than triple their urban areas. Surprisingly, most planners have not really considered the implications of projected population growth. To absorb the projected growth will require the official conversion of land on the periphery of cities from rural to urban use, then expanding the official limits of the urban area to accommodate the projected increase in the built-up area.

There is no shortage of affordable plots for the urban poor in these cities. Most residential plots are supplied by private landowners or developers who subdivide and sell minimally serviced land; others are occupied by land invasions. Preventing speculative price increases and ensuring that residential land remains affordable for the urban poor calls for a continuing supply of accessible urban land. To meet this challenge, municipalities must actively prepare for urban expansion by: (a) expanding their city limits; (b) planning for road grids in the areas of expansion; (c) locating the required 25- to 30-metre-wide right-of-way for the infrastructure grid on the ground; and (d) obtaining the land rights for the right-of-way by eminent domain, exchanging land among landowners where necessary and utilizing World Bank loans for land acquisition of road right-of-way (at the declared market value of their land for tax purposes) where required.

them. Development banks and international organizations such as UNFPA and UN-Habitat can help move this agenda forward with technical knowledge, advocacy and policy dialogue.

The international community and the general public tend to focus on the spectacular mega-cities and urban conurbations. However, small and intermediate cities will experience the bulk of urban growth. They tend to be under-resourced and under-serviced but, on the whole, have easier access to land. A lot more could be done with a lot less to help smaller cities generate and utilize information and other forms of support. This would make the urban transition more effective in promoting the global aim of reducing poverty.



## 4

# The Social and Sustainable Use of Space

*Humanity has been given a second chance: we now need to build urban areas yet again that are at least equivalent in size to the cities that we have already built, we need to do it better, and we need to do it in a very short time.<sup>1</sup>*

## Urban Growth and Sustainable Use of Space

The space taken up by urban localities is increasing faster than the urban population itself. Between 2000 and 2030, the world's urban population is expected to increase by 72 per cent, while the built-up areas of cities of 100,000 people or more could increase by 175 per cent.<sup>2</sup>

The land area occupied by cities is not in itself large, considering that it contains half the world's population. Recent estimates, based on satellite imagery, indicate that *all* urban sites (including green as well as built-up areas) cover only 2.8 per cent of the Earth's land area.<sup>3</sup> This means that about 3.3 billion people occupy an area less than half the size of Australia.

However, most urban sites are critical parcels of land. Their increased rate of expansion, and where and how additional land is incorporated into the urban make-up, has significant social and environmental implications for future populations.

From a social standpoint, as shown in Chapter 3, providing for the land and shelter needs of poor men and women promotes human rights. It is critical for poverty alleviation, sustainable livelihoods and the reduction of gender inequalities. Most city growth will be in developing countries, and many of the new urbanites will be poor. The form and direction of future city growth, as well as the way land is apportioned, utilized and organized, are all critical for economic growth and poverty reduction. Planners and policymakers must take proactive stances, based on a broader and longer-term vision, to guarantee the rights to the city for a rapidly growing number of poor people.

The territorial expansion of cities will also affect environmental outcomes. The conventional wisdom has been that the expansion of urban space is detrimental in itself. Since many cities are situated at the heart of rich agricultural areas or other lands rich in biodiversity, the extension of the urban perimeter evidently cuts further into available productive land and encroaches upon important ecosystems.

◀ A woman looks down on the city from her house on a hillside slum in Caracas, Venezuela.

© Jacob Silberger/Panos Pictures



▲ Men push bikes laden with coal in a mixed and rapidly-growing peri-urban area in Jharkhand State, India.

© Robert Wallis/Panos Pictures

At the same time, however, there is increasing realization that urban settlements are actually necessary for sustainability. The size of the land area appropriated for urban use is less important than the way cities expand: Global urban expansion takes up much less land than activities that produce resources for consumption such as food, building materials or mining. It is also less than the yearly loss of natural lands to agricultural activities, forestry and grazing, or to erosion or salinization.<sup>4</sup>

Asked the defining questions—“If the world’s population were more dispersed, would it take up more valuable land or less? Would dispersion release prime agricultural land? Would it help avoid the invasion of fragile ecosystems?”—the answer, in most countries, would be “No!” Density is potentially useful. With world population at 6.7 billion people in 2007 and growing at over 75 million a year, demographic concentration gives

sustainability a better chance. The protection of rural ecosystems ultimately requires that population be concentrated in non-primary sector activities and densely populated areas.<sup>5</sup>

The conclusion that using land for cities is potentially more efficient only heightens the need for careful and forward-looking policies, in light of the rapid doubling of the urban population in developing countries. This chapter looks at current patterns of urban territorial expansion and their implications. It proposes putting more effort into orienting urban growth, thus allowing cities to contribute to social development and sustainability.

This proposal calls for a vision based on solid analysis, and encompassing a broader notion of “space” than the one imposed by political and administrative city limits. It also demands a longer time horizon than the terms of politicians or administrators.

## Density, Urban Sprawl and Use of Land<sup>6</sup>

A recent study commissioned by the World Bank shows that modern patterns of city growth are increasingly land-intensive.<sup>7</sup> Average urban densities (that is, the number of inhabitants per square kilometre of built-up area) have been declining for the past two centuries. As transportation continues to improve, the tendency is for cities to use up more and more land per person.<sup>8</sup>

The built-up area of cities with populations of 100,000 or more presently occupy a total of about 400,000 km<sup>2</sup>, half of it in the developing world. Cities in developing countries have many more people but occupy less space per inhabitant. In both developing and industrialized countries, the average density of cities has been declining quickly: at an annual rate of 1.7 per cent over the last decade in developing countries and 2.2 per cent in industrialized countries.<sup>9</sup>

In developing countries, cities of 100,000 or more are expected to *triple* their built-up land area to 600,000 km<sup>2</sup> in the first three decades of this century. Cities in developed countries expand at an even faster rate per resident, despite their smaller population size and lower rate of population growth. They will increase their built-up land area by 2.5 times between 2000 and 2030. At that point, they will occupy some 500,000 km<sup>2</sup>.<sup>10</sup>

Thus, should recent trends persist over the next 30 years, the *built-up land area* (i.e., excluding green areas) of cities of 100,000 or more would grow from a territory the size of Sweden to one like Ethiopia. But these projections might actually understate the possibilities. Recent trends to lower densities may accelerate as globalization has its effect on lifestyles and production processes. Whatever the case, the data show that developing countries now share the trend to urban sprawl.

Urban sprawl results from the combination of different types of pressures on territorial expansion. For purposes of simplicity, these can be classified into two groups: residential suburbanization and peri-urbanization.

*Modern patterns of city growth are increasingly land-intensive. Average urban densities ... have been declining for the past two centuries. As transportation continues to improve, the tendency is for cities to use up more and more land per person.*

## The Discreet Charm of Suburbia

The modern trend to urban sprawl began in North America after World War II, where suburban growth came to symbolize the “American way of life”.<sup>11</sup> The ethos of a return to rural living and of being closer to nature was an important part of this search for a better quality of life, though it actually placed greater stress on “natural” environmental amenities. Subsequent regulatory regimes and economic factors strengthened the cultural impulse to low density and single-use development.<sup>12</sup>

In North America, the intensive use of the automobile for daily commuting was both a cause and a consequence of urban sprawl.<sup>13</sup> This pattern of settlement spawned new locations for trade and services and this, in turn, further promoted automobile use and outward city growth.

The original suburban model of urban sprawl was closely associated with lifestyle preferences and the widespread availability of the automobile in a particular cultural setting. Housing, road-building and zoning policies, also inspired by suburban ideals, combined to promote low-density housing.

Today, the suburbs of cities in North America have become more diversified. Catering to the needs of the suburban population stimulated decentralization of economic activities and the diversification of outlying areas. Nevertheless, the stereotypical suburb with its dispersion and individual housing still prevails as a sort of ideal model.

The lifestyles and values associated with American consumption patterns have apparently promoted preferences in other regions for living farther from the city centre. These value changes, and the greater availability of personal transport, especially the automobile, are spreading cities outward. In this way, the American dream is being reproduced in the most diverse social and economic contexts.<sup>14</sup>

Even in Europe, where cities have traditionally been compact, there are signs that sprawl and suburbanization are increasing.<sup>15</sup> Between 1969 and 1999, for instance, the urbanized areas in France increased by five times, while the population of these areas grew only by 50 per cent.<sup>16</sup> The

trend is even more recent in Mediterranean Europe, but there, too, the model of dense and compact cities is being replaced by a model similar to that of the American suburbs.<sup>17</sup> In Barcelona, observers have noted a significant increase in the settlement of areas beyond the consolidated centre.<sup>18</sup>

Suburbanization appears to be more complex in developing countries. Given their pervasive poverty and inequality, the culture of the automobile and its far-reaching impact on urban civilization arrived later and continue to be restricted to a minority. At the same time, the relative precariousness of public transportation and infrastructure has prevented wealthier people from moving to the suburbs in large numbers and commuting easily from there—a pattern established in innumerable North American cities.

In Latin America, for instance, which was marked by rapid and precocious urbanization, the cities actually grew upwards rather than outwards during their period of most rapid urban growth. That is, at the height of the urbanization process in the 1970s, the upper and middle classes pre-empted space in the urban centres and expelled much of the poorer population to the periphery or other inaccessible locations.<sup>19</sup> Since poor urban people occupy small houses and little land, overall density remained high.

Some extension of the American pattern of settlement to outlying areas of cities has been observed recently in most low- and middle-income countries.<sup>20</sup> More affluent suburbs are increasingly found in most cities. In short, the globalization of markets and consumption patterns is leading to the reproduction of urban settlement patterns in the mould of the American dream.

Nevertheless, suburbanization of the affluent is insufficient to explain the growing trend to urban sprawl, especially in developing countries. We must look for additional explanations.

### Sprawl and Peri-urbanization<sup>21</sup>

The growth of cities in the developing world is dynamic, diverse and disordered—and increasingly space-intensive. This process of urban growth, largely in non-contiguous transitional zones between countryside and city, is increasingly being referred to as “peri-urbanization”.<sup>22</sup> Peri-urban areas often lack clear regulations and administrative authority over land use.<sup>23</sup> They suffer some of the worst

consequences of urban growth, including pollution, rapid social change, poverty, land use changes and degradation of natural resources.<sup>24</sup> But, as opposed to suburbia, they are home to a variety of economic activities.

Peri-urbanization is fuelled, in part, by land speculation, nurtured by the prospect of rapid urban growth. Speculators hold on to land in and around the city, expecting land values to increase. They do not bother renting, especially if they fear that users might gain some rights to continued use or controlled rents. People who need land for residential or productive purposes must therefore find land further from the centre.

Changes in the structure and location of economic activity contribute greatly to peri-urban growth. Better communications and transportation networks make outlying areas increasingly accessible. Globalization

### 18 CASE STUDY: PERI-URBANIZATION IN QUANZHOU MUNICIPALITY, FUJIAN PROVINCE, CHINA<sup>1</sup>

Peri-urbanization transforms rural settlements into urban ones without displacing most of the residents. An important characteristic of China’s urbanization since the 1980s, it has brought tremendous structural and physical change to vast rural areas. It has also blurred the lines between urban and rural settlements, especially in the densely populated coastal areas. Peri-urbanization has benefited large rural populations who might otherwise have gone to the slums of large cities. On the other hand, it lacks the economic advantages of agglomeration in large cities and has serious negative effects on the environment.

In a study of Quanzhou Municipality of Fujian Province, researchers used recent census data and geographic information systems technology to address the environmental and planning implications of peri-urbanization. They found that peri-urbanization has helped to transform the region into an economic powerhouse, led by small and medium-sized enterprises. However, the latter are under-capitalized and widely dispersed. Environmental problems also abound. With new resources for environmental protection and management becoming available, the challenge will be to encourage greater concentration, minimizing its negative effects while maintaining the benefits.

encourages economies of scale in production and distribution, which, in turn, encourage large facilities occupying large tracts of land.

This deconcentration and decentralization of production is often found on the outskirts of the more dynamic cities, where growing workplaces and workforces can no longer find space in city centres, making spill-over growth inevitable. In turn, the periphery offers cheaper infrastructure, land and labour, which encourage further peri-urbanization.<sup>25</sup>

In Asia, peri-urbanization tends to incorporate small towns along urban corridors spreading out from metropolitan regions, for instance, in China's coastal regions, Bangkok's metropolitan region, the Lahore-Islamabad highway, and in Viet Nam's craft and industry villages in the Red River Delta. By contrast, in most of sub-Saharan Africa, cities expand around a single core.<sup>26</sup>

Peri-urbanization draws a migrant workforce and abruptly changes many rural residents' economic activity from agriculture to manufacturing and services. Such changes have been particularly pronounced in East Asia, where agrarian villages have become leading edges of urban change.<sup>27</sup>

In East Asia, the combination of ill-defined property rights, export-driven policies and imperfect land markets has contributed to particularly rapid peri-urban growth.<sup>28</sup> In China, foreign investments have transformed rural economies and communities, often triggering major changes in social structure and human-environment relations (see Box 18). Peri-urbanization and its effects are not limited to coastal regions such as Shanghai and the Pearl River Delta, but have penetrated into the interior regions of the country, including Chongqing and Chengdu.<sup>29</sup>

Peri-urban areas often provide more accessible housing for poor residents and migrants in informal and scattered settlements.<sup>30</sup> Poor settlements in such areas tend to be more insecure and subject to removal, while their residents generally lack services and infrastructure. They compete with agriculture for space, and both can be displaced by other economic uses. Land conversion, market opportunities, and rapid flows of labour, goods, capital and wastes force land prices up.<sup>31</sup> Peri-urbanization also increases the cost of living for the original rural population.<sup>32</sup>

## 19 URBAN AND PERI-URBAN AGRICULTURE

Agriculture is booming in urban and peri-urban areas. Farming in and around cities is a vital livelihood strategy for the urban poor; it provides nutritional health, income for other household expenses and mitigates some of the ecological problems of growing urban areas. The downside is that it continues to be illegal in parts of the developing world, and many local authorities are slow to recognize its important role. As primary producers of food crops in many developing-country cities, women stand to gain or lose the most as the future of this activity is determined.<sup>1</sup> Some promising efforts by NGOs—such as the Municipal Development Partnership for Eastern and Southern Africa (MDPESA), and its funding partner Resource Centre on Urban Agriculture and Forestry—are under way to bridge the gap between perception and reality. Through evidence-based advocacy and multi-stakeholder dialogues, it has encouraged local officials in Zimbabwe to recognize urban and peri-urban agriculture and join in endorsing the Harare Declaration, a commitment by several African countries to support urban agricultural practices.<sup>2</sup>

Peri-urban areas encompass a wide range of activities, including farming, husbandry and cottage industries, together with industrial expansion, land speculation, residential suburbanization and waste disposal.<sup>33</sup> They fulfil other key functions for urban areas, from the supply of food (see Box 19), energy, water, building materials and other essentials, to the provision of ecological services such as wildlife corridors, microclimates and buffer areas against flooding. This involves a complex readjustment of social and ecological systems as they become absorbed into the urban economy.

Since peri-urban areas are generally beyond or between legal and administrative boundaries of central cities, the capacity of government authorities to regulate occupation is particularly weak.<sup>34</sup> As a result, the process of urbanization can be, to a great extent, unplanned, informal and illegal, with frequent struggles over land use.

Environmental degradation is also an issue in peri-urban areas. Specific health hazards arise when agricultural and industrial activities are mingled with residential use. Some peri-urban areas become sinks for

urban liquid, solid and sometimes airborne wastes.<sup>35</sup> The type, impact and gravity of such problems vary considerably.<sup>36</sup> The lack of regulation of these lands and their use can endanger the health of poor people who settle or reside there, because they may be exposed to hazardous substances in the air, the water they drink and the food they grow. Risks may be greater for low-income women and children, who are more likely to spend most or all of their time in their homes and immediate environs.<sup>37</sup>

The varied processes of peri-urbanization described here defy simple definition or quantification, but suggest that there must be opportunities for more social and sustainable uses of peri-urban space.

## 20 IMPROVING BASIC SERVICES IN PERI-URBAN AREAS OF OUAGADOUGOU'

Burkina Faso's capital city of Ouagadougou is a fast-growing home to more than a million inhabitants. A third of them now live in peri-urban "shantytowns" spread out over a large area. Sprawl hikes up the costs of providing the poor population with water and sanitation and increases their desolation.

The French Agency for Development is supporting the Government of Burkina Faso in establishing roadway systems to improve transportation (45 km of primary infrastructure, including 18 km in the densely populated shantytowns of Bogodogo), as well as in devising innovative ways of attending to water and sanitation needs (including the sale of water in bulk quantities to an independent operator, in exchange for guaranteed distribution).

In addition, public spaces are being improved—pedestrian pathways and sidewalks, street lighting and playgrounds—and shared water delivery points installed. The local population is actively participating in the validation and financing of the proposed equipment. The capacity of the local Government to monitor and maintain the current road and sewer system infrastructure is also being strengthened. Providing basic services to such resource-poor residents of peri-urban areas directly addresses Targets 10 and 11 of the MDGs. Burkina Faso's innovative technical and institutional responses in this regard are heartening. The main challenge will be to prepare for continued rapid expansion of the demand in housing and services.

## To Sprawl or Not to Sprawl

There is much debate among experts over the advantages of compact versus decentralized cities, but no consensus. Disagreement arises over the varied sources of sprawl, methodological issues and conflicts in values.

Residential suburbanization has its roots in cultural aspirations and has been promoted by official policies, but both the aspirations and the policies have come into question. By contrast, urban growth by peri-urbanization is largely unplanned and without direction. These different contributions to urban sprawl need to be reviewed with regard to their wider implications.

Environmentalists generally deprecate the decline in urban density associated with suburbanization. They see compact cities as more sustainable, because they minimize commuting, thereby using less energy and reducing air pollution. Sprawl additionally increases water consumption and eats up green space.

Few urban planners defend sprawl, but some question whether intensifying use can deliver a more sustainable urban future. They also question whether dense occupation is acceptable to the general public.<sup>38</sup> A large house on a large lot, with good automobile access to facilities, is what most people seem to want.<sup>39</sup>

Much of the discussion, whether it accepts or bemoans urban sprawl, assumes that the dispersed city is how people want to live—but this may simply reflect the bias of the discussants, who are mostly from developed countries. Dispersed suburban settlement seems simply unrealistic for urban masses in developing countries. The debate also reflects differences in values, ethics and aesthetics, adding heat to the discussion about the equity and sustainability of compactness.

Conceptual and methodological issues tend to undermine the discussion, because of the great diversity of definitions of "an urban place". Depending on the criteria used to define an urban agglomeration, conclusions about density and other criteria of sprawl will evidently vary.

Whatever the conceptual difficulties, "the green dimension" should have full consideration in this debate. The concept of sustainable development implies solidarity with future generations. Many environmental benefits are difficult to achieve over the short term. Preserving natural



▲ *Night view of urban highways and overpasses in Shanghai, China.*

© Brigitte Hiss/sinopictures/Still Pictures

areas, reducing energy consumption, encouraging biodiversity, protecting river basins and reversing climate change are all valuable in their own right, but they are also essential for the quality of life of future generations.

The discussion often neglects to notice that sprawl is increasingly attributable to peri-urbanization and to the mobility of economic activity, especially in developing countries. In view of the prospect of inevitable and massive urban growth, peri-urbanization and its leapfrog style of growth have important social and environmental implications.

Neither governments nor international development organizations have effectively responded to this challenge. But these issues will not resolve themselves without intervention. There is no invisible hand to order urban growth

in accordance with societal needs, intergenerational responsibilities or gender-specific concerns.<sup>40</sup>

In developing countries, where peri-urbanization is an important driver of urban sprawl, some sort of planning and regulation is needed to minimize the bad and maximize the good aspects of urban expansion. Urban and regional planning, which many countries placed on the back burner in response to structural adjustment policies and the demands of breakneck globalization, will have to be resuscitated to meet this challenge. Sprawl, at least in its current forms, is not conducive to sustainable development. Compact settlement may not be the only, the best or, in some cases, even a feasible solution. The spatial form of urban expansion does, however, need to be negotiated more efficiently, more equitably and more environmentally.

## Realistic Policies for Urban Expansion

*The [Third Urban] Forum placed great emphasis on planning as a tool for urban development and environmental management, and as a means of preventing future slum growth.<sup>41</sup>*

What will it take to put some sort of order into large-scale urban expansion? Policies may be directed at: a) rural-urban migration; b) the distribution of urban populations among cities; and c) the process of urban development in individual cities.<sup>42</sup>

Preventing rural-urban migration is not only very difficult but counter-productive (see Chapter 3). Few of the policies directed at altering the distribution of population among cities have had much success. The remaining approach is to take a proactive stance to shaping the future growth of individual cities:

### 21 PREPARING FOR THE FUTURE IN THE BIG APPLE'

The Bloomberg Administration in New York City is unveiling plans to deal with medium- and long-term needs of a growing metropolis. Amongst many other projects, it is developing a "strategic land use plan" to deal with a city with a projected population of 9 million people. Among the priorities is the reclamation of 1,700 acres of polluted land and their transformation into environmentally sound sites for schools, apartments and parks. Plans also involve the improvement of commuting, water supply, sanitation and air pollution.

The city used its failed bid for the 2012 Olympic Games as a springboard for the sort of longer-range planning that local governments rarely have the resources or vision to develop. The fact that New York City is not empowered to annex neighbouring cities has encouraged it to make zoning changes and recycle land in order to promote greater density. The initiative is being led by the administration's recently created Office of Long-term Planning and Sustainability, composed of members of 15 city agencies, plus scientists, academics, neighbourhood activists and labour leaders.

These long-range plans will evidently have to give explicit consideration to the possible effects of global warming on the city, where 8 million people—and several million more in the greater conurbation—now live at or close to sea level.

"The key issue facing public-sector decision makers—at the local, national and international levels—is not whether or not urban expansion will take place, but rather what is likely to be the scale of urban expansion and what needs to be done now to adequately prepare for it. . . . The message is quite clear—developing country cities should be making serious plans for urban expansion, including planning for where this expansion would be most easily accommodated, how infrastructure to accommodate and serve the projected expansion is to be provided and paid for, and how this can be done with minimum environmental impact."<sup>43</sup>

Given the economic, social and environmental implications of the inevitable explosive growth of urban populations in developing countries, the absence of a coordinated proactive approach is astounding. This lack of attention is the product of several factors, including politicians' short planning horizons; governments' unwillingness to accept urbanization as a positive trend and to prepare for orderly urban expansion; planners' preference for ambitious and utopian master-plans (that, ultimately, have little prospect of being implemented); and the failure of international organizations to push this agenda.<sup>44</sup>

Instead of making realistic minimal preparations for urban growth, many authorities simply hope against hope that their overcrowded cities will stop growing, or they undertake master plans that take many years to complete and are usually shelved soon after.<sup>45</sup>

The inevitable growth of developing-country cities and their peri-urban surroundings, demands a coordinated and proactive approach (see Box 21). Within the overall framework, there must be a new set of realistic, equitable and enforceable regulatory regimes. In this process, care should be taken not to disturb sensitive lands and watersheds. Provisions for land, infrastructure and services for the poor should be a key concern. The local population should be involved in any discussion of future growth in order to guarantee people's rights while increasing the success rate of planning efforts. The discussions in Chapter 3 concerning the land needs of the poor assume particular relevance in this context.

Sorting out the land issues in future urban growth is but one aspect of the question, though an important

## 22 PUTTING DEMOGRAPHIC TOOLS TO WORK

The population field is integral to understanding the needs and providing solutions for city regions. Even in the absence of an appropriate administrative entity covering an entire region, policymakers can use satellite images and geographic information systems (GIS), together with demographic data, to provide accurate information on population size and density, as well as areas of urban expansion, slum growth and needs for environmental protection.

In Ecuador and Honduras, UNFPA has supported post-census technical training so that local agencies learn how best to analyse census data at the disaggregated level for planning purposes. This includes utilizing tract-level census data in combination with simple population projections to better estimate the future demand for various kinds of services. Small- to medium-sized municipalities and decentralized areas of growth are most likely to need technical support in order to apply such tools.

These data can be used in conjunction with information on elevation, slope, soils, land cover, critical ecosystems and hazard risks to identify areas in which future settlement should be promoted or avoided. In order to be useful within a GIS, census data should be processed and made available at the most spatially disaggregated level possible, so that they can be used at a variety of scales from regional to local.

one. A broader political and spatial approach, within a longer time frame, is also required to deal with other sustainability and organizational issues. Sprawl and peri-urbanization tend to fragment urban space in unpredictable ways, producing nuclei of different sizes and densities, with a variety of common or unique problems. The solution lies not so much in prescribing the relative density of urban areas as in good local governance that can guide urban development, and yield appropriate densities.

In the current situation, fragmentation of the urban territory brings both administrative inefficiency and environmental setbacks. The boundaries of the city's administration rarely coincide with its actual area of influence. In the case of larger cities, this area usually extends over neighbouring subregions, which may include smaller cities, as well as peri-urban and rural areas.

Without some sort of regional entity, the administration of key services, such as water and transport, that cut across different boundaries is very difficult. By the same token, fragmentation breaks up the contiguity that natural processes require. Fragmentation also makes it difficult to protect ecologically fragile areas or regulate for environmental integrity.<sup>46</sup> From a technical standpoint, dealing effectively with the social and environmental realities of city regions requires constantly updated information and analysis, which most urban areas do not have (see Box 22).

Cities have a huge impact on their surrounding region but, in most cases, do not or cannot take responsibility for managing it.<sup>47</sup> Common issues among the scattered nuclei of a fragmented urban system demand a wider outlook. Environmental degradation and poverty are part of the broader sweep of economic, social and demographic changes associated with peri-urbanization. They have to be addressed in coordinated and proactive efforts.

The key question, therefore, is who will take the initiative in an urban world marked by these growth processes? The suggestion made here is to approach the organization and regulation of spatial processes that affect social and environmental well-being from a regional, rather than a strictly urban perspective.<sup>48</sup> The concept of "city-regions" is useful in this new social, economic and political order. It provides an easily understandable starting point in advocating for a more coordinated and effective approach to dealing with the growing problems of sprawling urban and peri-urban areas,<sup>49</sup> and on behalf of the urban poor as an essential and dynamic element in urban development.

It is important that the city-region be seen, not as another supra-local entity, which would make it even less accessible to poor people, but as a form of cooperation and negotiation between adjacent local governments with different needs and priorities. This is obviously necessary to address the basic needs of the population, to manage natural resources and wastes, and to deal with all the other complications resulting from unregulated and rapid urban expansion.



## 5

# Urbanization and Sustainability in the 21st Century

*It is particularly ironic that the battle to save the world's remaining healthy ecosystems will be won or lost not in tropical forests or coral reefs that are threatened but on the streets of the most unnatural landscapes on the planet.<sup>1</sup>*

## Cities: Burden or Blessing?

Preserving the rights of our children and grandchildren to health and happiness depends on what we do today about global environmental change. The battle for a sustainable environmental future is being waged primarily in the world's cities. Right now, cities draw together many of Earth's major environmental problems: population growth, pollution, resource degradation and waste generation. Paradoxically, cities also hold our best chance for a sustainable future.

Urban concentration need not aggravate environmental problems. These are due primarily to unsustainable patterns of production and consumption and to inadequate urban management. Urban localities actually offer better chances for long-term sustainability, starting with the fact that they concentrate half the Earth's population on less than 3 per cent of its land area. As Chapter 4 suggests, the dispersion of population and economic activities would likely make the problems worse rather than better. Adopting the right approaches in anticipation of urban growth can also prevent many of the environmental problems linked to urbanization.

From a demographic standpoint, not only do dense settlements have greater capacity than rural areas to absorb large populations sustainably, but urbanization itself is a powerful factor in fertility decline. Urbanization provides few incentives for large families and numerous disincentives.

Urbanization will not, however, deliver its benefits for sustainability automatically: They require careful preparation and nurturing. The previous chapter made this point with respect to the internal organization of cities. This chapter looks at how cities affect, and are affected by, global environmental problems.

## Taking the Broader View<sup>2</sup>

People are already doing a great deal at the local level to make urban locations more habitable and environmentally friendly.<sup>3</sup> Cities can learn from each other and use positive experiences for their own benefit. However, finding local solutions to

◀ Busy pedestrian crossing in Tokyo, Japan.

© Mark Henley/Panos Pictures

current problems is not enough, given the rapid doubling of the urban population of developing countries in an era of economic globalization. Local strategies will have to be integrated into a more inclusive temporal and spatial framework to address broader problems and ensure longer-term sustainability.

The concept of global environmental change (GEC) provides such a framework. GEC is the sum of a range of local, national or regional environmental challenges.<sup>4</sup> GEC also denotes the impacts of these challenges, for example, changes in temperature and precipitation regimes that could increase the frequency of floods and droughts, raise sea levels or influence the spread of diseases and invasive species.

Urban areas both contribute to GEC, through the consumption of resources, land use and production of waste, and suffer its impacts. The full consequences of GEC will be felt only in the medium to long term. Because of this time lag, they are often ignored in favour of more immediately pressing environmental problems such as water supply, sanitation and waste disposal.

Yet policymakers must be aware that their local decisions have far-reaching effects and conversely that climatic or ecosystem changes may have a local impact. Both aspects require better information and a longer-term vision. Decisions being made today about energy sources, transportation systems and spatial planning will have a long-term impact on the regional and global biophysical processes that contribute to GEC. Solving current problems can help mitigate the impacts of GEC—but only if the interactions between local urban problems and regional and global processes are explicitly considered.

Such integrated thinking and planning can increase the resilience of urban areas to GEC-related shocks. For example, it can help to preserve healthy ecosystems or to ensure that new transportation, water supply and energy systems are built to withstand climate-related hazards. Conversely, actions aimed at long-term global issues may

contribute to solving more immediate and local environmental problems.

### Looking Beyond the Local

Urban areas depend on natural resources for water, food, construction materials, energy and the disposal of wastes. In turn, urbanization transforms local landscapes as well as ecosystems both local and further afield.

Mega-cities attract attention by their size and economic dominance. However, small and medium-sized cities, which currently house more than half the world's urban population and are expected to continue to have a predominant role, encounter similar challenges and pressures.<sup>5</sup>

Two issues in particular illustrate the interaction between urbanization and natural resources and their interaction with GEC. The first, changes in land use and land cover, has already been discussed at some length in Chapter 4.

The present chapter gives more attention to the impact of climate change and variability.

### Land Cover Changes

Rapid expansion of urban areas changes land cover and causes habitat loss. Chapter 4 noted how the combination of urban population growth, decreasing densities and peri-urbanization could convert large chunks of valuable land to urban uses in coming decades.

The environmental challenges posed by the conversion of natural and agricultural ecosystems to urban use have important implications for the functioning of global systems. How serious they are depends on where and how urban localities will expand. They depend even more on the patterns of consumption that city populations impose.

“Urban footprints” spread well beyond the immediate vicinity of cities, particularly in developed countries. Rising incomes and consumption in urban areas lead to increasing pressure on natural resources, triggering land-use and land-cover changes in their zones of influence, sometimes over vast areas. This typically causes much

*Policymakers must be aware that their local decisions have far-reaching effects and conversely that climatic or ecosystem changes may have a local impact. Both aspects require better information and a longer-term vision.*

greater losses of habitat and ecosystem services than urban expansion itself.

For example, tropical forests in Tabasco were razed to provide space for cattle, in response to rising demand for meat in México City, 400 km away. Rising demand for soybeans and meat in China's urban areas, added to the demand from Japan, the United States and Europe, is accelerating deforestation in the Brazilian Amazon.<sup>6</sup>

The "urban footprint" concept, which has been used to describe this expansion of the perimeter of urban consumption, is now quite familiar.<sup>7</sup> But many people take it to mean that urban concentration itself is the problem, rather than consumption by a large number of more or less affluent people. Evidently, urban centres in poor countries do not have the same footprint as those in developed countries.

The concept of the environmental transition brings out the differences between cities in high- and low-income countries.<sup>8</sup> In cities of poorer countries, environmental problems are local and mostly concern health, such as inadequate water and sanitation, poor air quality (inside houses as well as outside) and limited or no waste disposal. As average incomes increase, these immediate problems are not so pressing, but changes in productive activities and consumption patterns increase the impact on surrounding rural areas. In more affluent cities, local and regional impacts have usually declined through extended environmental regulation, investment in waste treatment and pollution control, and a shift in the economic base from industry to services. But affluence increases impact on global environmental burdens such as climate change.

▼ *Afghan refugee children provide cheap labour on the scrap tire heaps in Peshawar, Pakistan.*

© Thomas Dworzak/Magnum Photos



The issue of water is particularly relevant in this discussion. The dependence of cities on a guaranteed supply of water makes significant demands on global fresh water supplies. Cities already compete with the much larger demands of agriculture for scarce water resources in some regions such as the south-western United States, the Middle East, southern Africa, parts of Central Asia and the Sahel. In extreme cases—for instance, the Cutzmla system supplying México City—whole communities are flooded or relocated to make way for water supply infrastructure. This will be seen on a monumental scale should China complete the South-North Water Diversion.<sup>9</sup> Ultimately, cities outbid rural and agricultural users for available water supplies.<sup>10</sup>

Urban areas can affect water resources and the hydrological cycle in two other main ways: first, through the expansion of roads, parking lots and other impervious surfaces, which pollute runoff and reduce the absorption of rainwater and aquifer replenishment; and, secondly, through large-scale hydroelectric installations that help supply urban energy needs.<sup>11</sup>

These examples illustrate the complexities of addressing the impacts of cities on the biophysical system and highlight the need for a broad and integrated perspective.

### Cities and Climate Change

Climate change and its ramifications on urban processes cover a wide spectrum. Climate-related natural disasters are increasing in frequency and magnitude. Their consequences will depend on a number of factors, including the resilience and vulnerability of people and places.

Climate conditions have always shaped the built environment. Since the 1950s, however, traditional patterns adapted to local climatic conditions have been increasingly abandoned. Globalization and rapid technological developments tend to promote homogenized architectural and urban design, regardless of natural conditions. With this cookie-cutter architecture comes increased energy consumption from the transportation

of exogenous materials and from the utilization of a single building design in a variety of environments and climatic conditions without regard to its energy efficiency. In some places, energy is too cheap to motivate energy-efficient design; in other cases, developers ignore the costs, since sale prices do not reflect the future savings from higher energy efficiency.

The use of new architectural and urban forms, new materials and innovations such as air conditioning have driven up both energy costs and cities' contributions to greenhouse gas emissions. Technological advances have also permitted the rapid growth of cities in places



*Mother carries her child through filthy streets in Port Au Prince, Haiti. One of the poorest places in the Western Hemisphere, it lacks garbage collection services.*

© Melanie Stetson Freeman/Getty Images

previously considered uninhabitable. For instance, the American city of Phoenix has boomed thanks to engineering projects that diverted water from the Colorado River; city water in the Saudi Arabian city of Riyadh comes largely from desalinization plants.

Urban form and function also help define the nature of the interactions between cities and local climate change. For example, the “urban heat island effect” results from the impacts of different land uses in urban areas, creating microclimates and health consequences.

The urban heat island effect is an increase in temperatures in the urban core compared to surrounding areas. The size of the urban centre, the type of urbanization, urban form, function and land use all contribute to the effect. As villages grow into towns and then into cities, their average temperature increases 2 to 6°C above that of the surrounding countryside.<sup>12</sup>

Urban designs and forms that neglect local climatic conditions and lose the cooling effects of green areas tend to aggravate the heat island effect. Cities of poor countries in the tropics are particularly affected.

Rapid urban growth, combined with the potent impacts of climate variability and climate change, will probably have severe consequences for environmental health in the tropics (causing, for example, heat stress and the build-up of tropospheric ozone), which can affect the urban economy (for example, yield of labour and economic activities) and social organization.

In a vicious circle, climate change will increase energy demand for air conditioning in urban areas and contribute to the urban heat island effect through heat pollution. Heat pollution, smog and ground-level ozone are not just urban phenomena; they also affect surrounding rural areas, reducing agricultural yields,<sup>13</sup> increasing health risks<sup>14</sup> and spawning tornadoes and thunderstorms.

Human health in urban areas may suffer as a result of climate change, especially in poor urban areas whose

inhabitants are least able to adapt. They already suffer from a variety of problems associated with poverty and inequity. Climate change will aggravate these. For example, poor areas that lack health and other services, combined with crowded living conditions, poor water supply and inadequate sanitation, are ideal for spreading respiratory and intestinal conditions, and for breeding mosquitoes and other vectors of tropical diseases such as malaria, dengue and yellow fever. Changes in temperature and precipitation can spread disease in previously unaffected areas and encourage it in areas already affected.

Changes in climate and the water cycle could affect water supply, water distribution and water quality in urban areas, with important consequences for water-borne diseases.

The impacts of climate change on urban water supplies are likely to be dramatic. Many poor countries already face accumulated deficiencies in water supply, distribution and quality, but climate change is likely to increase their difficulties. The recent report of the Inter-governmental Panel on Climate Change underlines that cities in drier regions, such as Karachi in

Pakistan and New Delhi in India, will be particularly hard hit.<sup>15</sup>

### Poverty and Vulnerability to Natural Disasters

Cities are highly vulnerable to natural crises and disasters: Sudden supply shortages, heavy environmental burdens or major catastrophes can quickly lead to serious emergencies. The consequences of such crises are multiplied by poorly coordinated administration and planning.

Natural disasters have become more frequent and more severe during the last two decades, affecting a number of large cities (see Figure 7). The United Nations Environment Programme (UNEP) reports that, between 1980 and 2000, 75 per cent of the world’s total population lived in areas affected by a natural disaster.<sup>16</sup> In 1999, there were over 700 major natural disasters, causing more than US\$100 billion in economic losses and thousands of victims. Over 90 per cent of losses in

*The impacts of climate change on urban water supplies are likely to be dramatic. Many poor countries already face accumulated deficiencies in water supply, distribution and quality, but climate change is likely to increase their difficulties.*

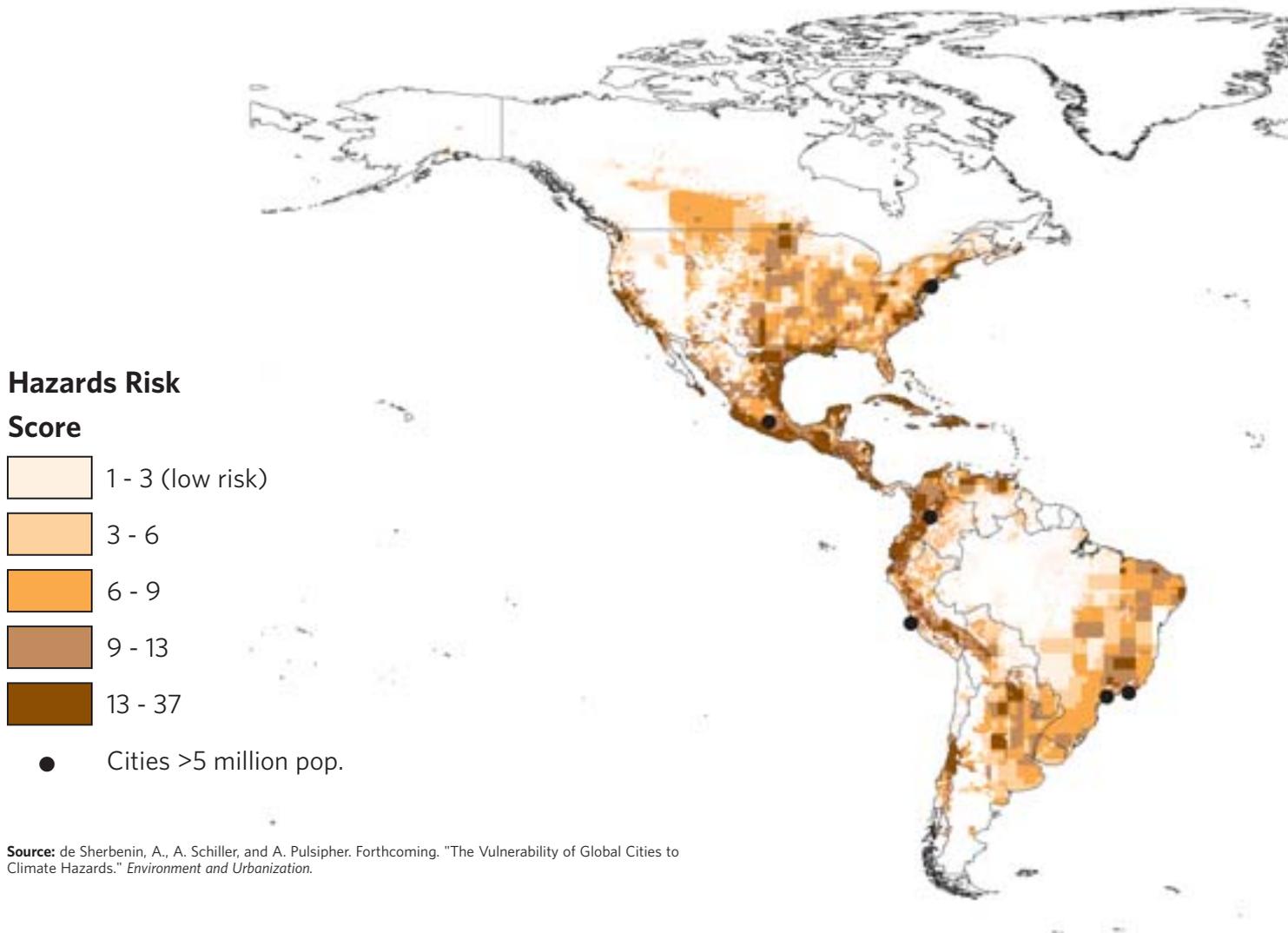
human life from natural disasters around the world occurred in poor countries.

The impacts of GEC, particularly climate-related hazards, disproportionately affect poor and vulnerable people—those who live in slum and squatter settlements on steep hillsides, in poorly drained areas, or in low-lying coastal zones.<sup>17</sup> For example, decades of informal settlements on hillsides surrounding Caracas, Venezuela, contributed to the devastating impact of the December 1999 flash floods and landslides, which reportedly killed 30,000 people and affected nearly half a million others.<sup>18</sup> Hurricane Katrina's impact on New Orleans (Box 23)

shows that developed countries are also not immune to such wide-scale disasters.

Drought, flooding and other consequences of climate change can also modify migration patterns between rural and urban areas or within urban areas. For example, severe floods in the Yangtze Basin, China, in 1998 and 2002, caused by a combination of climate variability and human-induced land-cover changes, displaced millions of people, mainly subsistence farmers and villagers. Similar examples can be seen in India, México and other poor countries. Many such “environmental refugees” never return to the rural areas from which they were displaced.

**Figure 7: Large Cities in Relation to Current Climate-related Hazards**



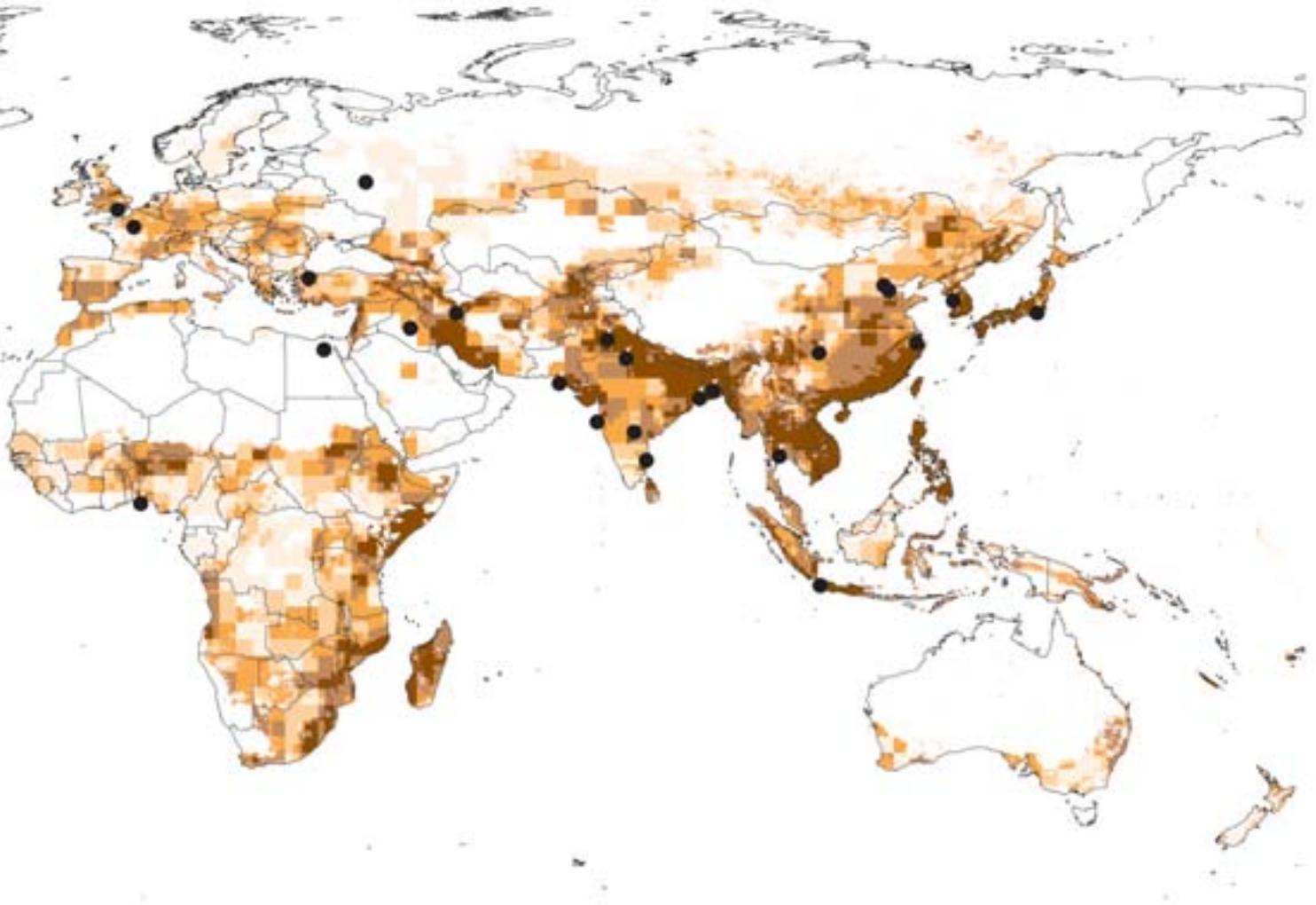
## Sea Level Rise: Not If but When, and How Much?\*

One of the alarming prospects of climate change is its impact on sea level rise and its potential consequences for coastal urban areas. Coastal zones have always concentrated people and economic activities because of their natural resources and trading opportunities. Many of the world's largest cities are on seacoasts and at the mouths of the great rivers. Both urban and rural areas of coastal ecosystems are the most densely populated of any in the world.

These populations, especially when concentrated in large urban areas within rich ecological zones, can be a

burden on coastal ecosystems, many of which are already under stress. They are increasingly at risk from seaward hazards such as sea level rise and stronger storms induced by climate change.

Sea level rise, especially if combined with extreme climatic events, would flood large parts of these areas. It would also introduce salt water into surface fresh water and aquifers, affecting cities' water supply, and modify critical ecosystems supplying ecological services and natural resources to urban areas. It would inevitably provoke migration to other urban areas. Coastal settlements in lower-income countries would be more



## 23 THE KATRINA DISASTER IN NEW ORLEANS'

Hurricane Katrina made landfall on the Gulf Coast of the United States on 29 August 2005. It killed over 2,800 people, destroying lives, leveling homes and leaving hundreds of thousands of survivors homeless. An estimated 9.7 million people living in Alabama, Louisiana and Mississippi experienced the hurricane-force winds. Katrina had its greatest effects on the city of New Orleans and in coastal Mississippi, but caused devastation as far as 160 km from the storm's center along much of the north-central Gulf Coast.

Across the three states hardest hit by the storm, about 4.9 million people, or some 41 per cent of the population, live in coastal areas. About 3.2 million people live within the imminent or occurring flood area. Poor people were the most affected by the hurricane. African-Americans and the elderly were more likely to reside in a flooded area and were more likely than non-elderly whites to die as a result of the flooding.

vulnerable and lower-income groups living on flood plains most vulnerable of all.

The first systematic assessment of these issues shows that low elevation coastal zones (LECZ) currently account for only 2 per cent of the world's land area but 13 per cent of its urban population.<sup>20</sup> Despite lower urbanization levels, Africa and Asia have much larger proportions of their urban populations in coastal zones than North America or Europe (see Table 1).

Such differences reflect the colonial heritage of Africa and Asia, where major cities grew as ports and export nodes of raw materials.<sup>21</sup> Asia stands out, as it contains about three quarters of the global population in the LECZ, and two thirds of its urban population.

The concentration of larger settlements in LECZ is striking. Thus, some 65 per cent of cities with more than 5 million inhabitants intersect that zone, compared to only 13 per cent of those with less than 100,000 people.

Given the real and increasing threats of global environmental change in LECZ, the continuation of present patterns of urban growth is of some concern. From an environmental perspective, uncontrolled coastal development is likely to damage sensitive and important

ecosystems and other resources. At the same time, coastal settlement, particularly in the lowlands, is likely to expose residents to seaward hazards that are likely to become more serious with climate change.

Continuation of present urbanization patterns will draw still greater populations into the low elevation coastal zone. In particular, China's export-driven economic growth has been associated with intensive coastal migration (see Figure 8). Bangladesh, despite its lower rates of economic growth and urbanization, is also witnessing a marked shift in population towards the LECZ.

Protecting coastal residents from risks related to climate change would require mitigation and migration away from the lowest-elevation coastal zones. It would also demand modification of the prevailing forms of coastal settlement.

Such interventions would evidently be easier in *new* urban areas. Avoiding policies that favour coastal development while imposing more effective coastal zone management would be crucial. However, such measures require a vision, a commitment and a long lead time.

It is thus of considerable importance to plan ahead on the basis of good information and analysis. Unfortunately,

**Table 1: Per Cent of Population and Land Area in Low Elevation Coastal Zone by Region, 2000**

Region	Shares of region's population and land in LECZ			
	Total Population (%)	Urban Population (%)	Total Land (%)	Urban Land (%)
Africa	7	12	1	7
Asia	13	18	3	12
Europe	7	8	2	7
Latin America	6	7	2	7
Australia and New Zealand	13	13	2	13
North America	8	8	3	6
Small Island States	13	13	16	13
World	10	13	2	8

**Source:** McGranahan, G., D. Balk and B. Anderson. Forthcoming. "The Rising Risks of Climate Change: Urban Population Distribution and Characteristics in Low Elevation Coastal Zones." *Environment and Urbanization*.



▲ *Victims of Hurricane Katrina in New Orleans, United States, try to save some of their precious belongings.*

© Jez Coulson/Panos Pictures

environmental considerations have not as yet had much influence on settlement patterns. Altering these patterns would require a proactive approach that is rarely found, given the priority placed on economic growth. This, in turn, will require awareness-raising and advocacy.

### Adapting to Climate Change

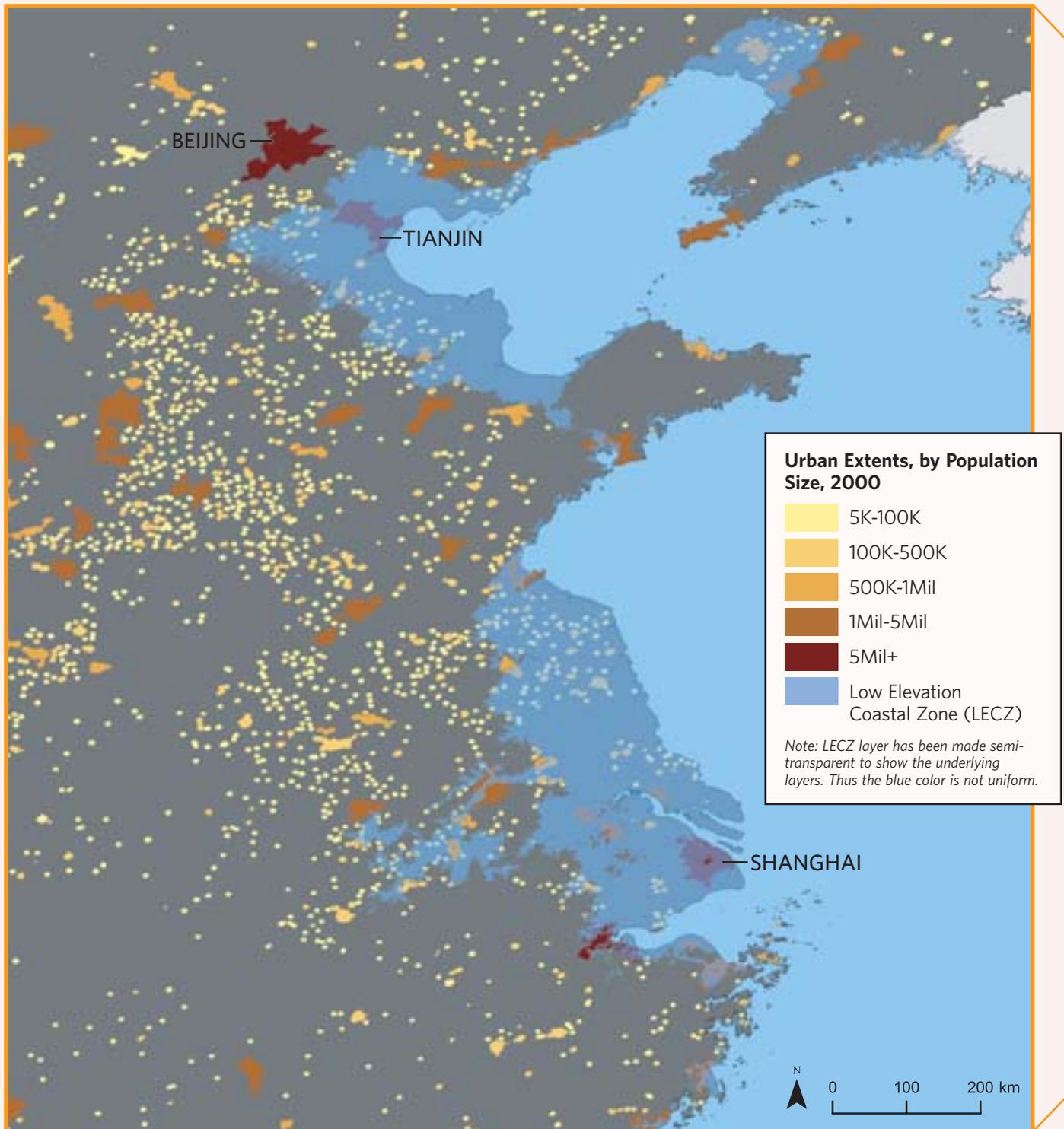
Other interactions with climate may not have the dramatic consequences associated with natural disasters, but they still have significant consequences for urban life and functions. For example, changes in average and extreme temperatures, or in the intensity and length of seasons, can have a significant influence on such things as economic activities (for instance, tourism); productivity of workers; use of urban space for social interaction; comfort index; water supply, distribution and quality; and energy demand.

The broad range of such impacts on urban areas should trigger responses of adaptation that are suitable to local conditions and resources. Adapting to local physical geography and climate conditions has a significant impact on the types of construction and on the ways that urban areas are built. Adaptation to biophysical cycles also modifies land use within urban areas and defines the way a city grows.

Despite growing knowledge about these issues, we still lack a comprehensive perspective of how climate change contributes to shaping the built environment, or how the built environment should adapt to likely changes in prevailing temperature and precipitation regimes.

Institutions play a significant role in helping urban systems to cope with, and adapt to, the negative consequences of global environmental change. For instance, the creation of international networks of cities is a new

Figure 8: China: Yellow Sea Coastal Region



and hopeful trend in attention to urban environmental issues.<sup>22</sup> These networks seek to facilitate the exchange of information and capacity-building at the local level on urban and environmental issues, and can also become politically influential at critical junctures.

### Local Actions, Global Consequences: Global Change, Local Impact

This chapter proposes that longer-term urban sustainability depends on policymakers' ability to take a broader view of the utilization of space and to link local developments with their global consequences.

A broader perspective improves the effectiveness of local actions while promoting longer-term sustainability. For instance, local planning for coastal development requires, at a minimum, a broader vision that connects proposed economic plans with such things as spatial aspects, land use, rates and characteristics of demographic growth, shelter and service needs of the poor, infrastructure, energy efficiency and waste disposal.

It also needs a vision inspired by global environmental concerns, in order to avoid damaging sensitive ecosystems and other resources. Both local and global perspectives, as well as good information, should determine the direction of future city growth.

Urban issues offer unique opportunities to translate scientific research into concrete policies. They involve a large number of stakeholders, at national, city, neighbourhood and household levels, including governments, the private sector and civil society. Given the increasing attention from a number of international organizations, and from national and local governments, raising global awareness starting from the local urban context should become easier.

Urban areas are also typically more affluent than rural areas and therefore better able to find local financing for major projects. Their effectiveness will ultimately depend on taking a more proactive stance, inspired by a vision of the actions needed now to guarantee longer-term sustainability.



**Source:** McGranahan, G., D. Balk, and B. Anderson. Forthcoming. "The Rising Tide: Assessing the Risks of Climate Change and Human Settlements in Low Elevation Coastal Zones." *Environment and Urbanization* 19(1).

Note: Hazard risk represents a cumulative score based on the risk of cyclones, floods, landslides and drought.



## 6

# A Vision for a Sustainable Urban Future: Policy, Information and Governance

*Managing urban growth has become one of the most important challenges of the 21st century.<sup>1</sup>*

Urbanization offers significant opportunities to reduce poverty and gender inequality, as well as to promote sustainable development. Yet, without effective approaches in preparation for the massive increase in the number of poor people, slums will multiply and living conditions will continue to deteriorate. If cities persist in the uncontrolled expansion of urban perimeters, indiscriminate use of resources and unfettered consumption, without regard to ecological damage, the environmental problems associated with cities will continue to worsen.

How can cities avoid calamity and make the most of their opportunities? Increasingly, it is hoped that *improved urban governance* will be the answer.

The term “urban governance”, formerly equated with urban management, has come to be understood as both government responsibility and civic engagement.<sup>2</sup> Generally, it refers to the processes by which local urban governments—in partnership with other public agencies and different segments of civil society—respond effectively to local needs in a participatory, transparent and accountable manner.

Good governance will indeed be essential in our urban future; however, its concerns and planning horizons must extend beyond *current* needs. In many developing nations, present urban problems are only the beginning. As globalization continues, massive future urban growth is both inevitable and necessary, but the way it grows will make all the difference. Cities need a longer-term strategy for expected change.

This Report has repeatedly made the point that effective responses to the urban challenge must also add a spatial dimension to this longer-term outlook. Therefore, integrating social and environmental concerns for urban growth within a broader vision of time and space is critical for sustainability.

Several processes will affect the exercise of urban governance. All accentuate the responsibility of local governments, traditionally the weakest link in the public sector.<sup>3</sup>

First, the increasingly globalized nature of economic relations is shifting some trade and production, and thus economic growth, away from the largest cities.

◀ *This street in Beirut, Lebanon, overlooking the Mediterranean offers commerce, recreation and, on this day, moments of late afternoon serenity.*

© Paolo Pellegrin/Magnum Photos

Enterprising local governments have the option to build on their comparative and locational advantages and thus help local firms to attract foreign direct investment to their cities.

Second, national governments are devolving some of their powers and revenue-raising authority to local governments in most developing countries. This opens up new opportunities for local governments to take a more active role in social and economic development.

Third, closer attention to human rights and the rise of civil society, along with movements towards democratization and political pluralism, have also given local-level institutions more responsibility in many countries.<sup>4</sup> This

trend toward democratization helps to strengthen urban governance by increasing popular participation and making local administration more accountable.

Finally, these trends towards localization and decentralization become more important because half of all urban demographic growth is occurring in smaller localities. These have the advantage of flexibility in making decisions on critical issues, such as land use, infrastructure and services, and are more amenable to popular participation and political oversight. On the other hand, they tend to be under-resourced and under-financed. They also lack critical information and the technical capability to use it.

The scale of the challenge arising from these converging trends is clear: Much needs to be done in order to turn urbanization's potential into reality. Doing so calls for a broader vision. Smaller localities particularly need help. These concerns will be the subject of the next section.

### What Can We Do?

International organizations, including UNFPA and UN-Habitat, can do at least three things to help national and local governments, as well as civil society movements, to promote a better future for cities and their residents in the developing world.

First, they can help to bring about necessary changes in policy outlook by influencing planners and policymakers in developing countries to accept urban growth as inevitable and to adopt more proactive and creative approaches. These approaches should build on, rather than discourage, the efforts of poor individuals and groups to gain more secure, healthy and gainful homes and livelihoods in urban centres.

Second, they can help indicate a better way to reduce rates of urban growth, thereby giving policymakers more leeway to tackle urban problems. The major component of this



◀ A Buddhist monk uses an ATM cash machine in Chiang Mai, Thailand.

© Martin Roemers/Panos Pictures

growth in today's developing countries—natural increase—can best be addressed through poverty reduction, promotion of women's rights and better reproductive health services.

Third, international organizations can help policymakers and the different segments of civil society make better decisions regarding the urban future by encouraging them to generate and use solid sociodemographic information.

## A Vision for the Urban Future

Dealing effectively with expected urban growth will require an open mind. The evidence overwhelmingly points to the need for policymakers at all levels in developing countries to accept urbanization as a potential ally in development efforts. Evidence-based policy dialogue is needed to help convince them that urbanization is not only inevitable, but that it can be a positive force. Key arguments include the following:

### *Cities have important advantages:*

- Although urban concentration increases the visibility and political volatility of poverty, it has definite advantages over dispersion. These advantages are economic, social and environmental as well as demographic.
- Economic competition is increasingly globalized; cities are better able to take advantage of globalization's opportunities and to generate jobs and income for a larger number of people.
- Cities are in a better position to provide education and health care—as well as other services and amenities—simply because of their advantages of scale and proximity. Poor governance, and decisions prompted by a negative attitude to urbanization and urban growth, explain why these advantages do not always materialize.
- Urbanization helps to hold back environmental degradation by offering an outlet for rural population growth that would otherwise encroach upon natural habitats and areas of biodiversity. Cities are worse polluters than

rural areas, simply because they generate most of a country's economic growth and concentrate its most affluent consumers. But many environmental problems could be minimized with better urban management.

- From a demographic standpoint, urbanization accelerates the decline of fertility by facilitating the exercise of reproductive health rights. In urban areas, new social aspirations, the empowerment of women, changes in gender relations, the improvement of social conditions, higher-quality reproductive health services and better access to them, all favour rapid fertility reduction.

### *Getting policies right in curbing urban growth:*

- Most urban growth is occurring in small and medium-sized cities. This trend will continue into the foreseeable future. As noted above, governance issues in these cities are critical. Small and medium-sized cities have greater flexibility in dealing with rapid growth but fewer resources. More emphasis thus needs to be placed on helping these cities grow sustainably.
- The primary component of urban growth is usually not migration but natural increase in the cities themselves. The most effective way to decrease rates of urban growth is to reduce unwanted fertility in both urban and rural areas. Poverty, coupled with gender discrimination and sociocultural constraints, shapes the fertility preferences of the urban poor and limits their access to quality reproductive health services.
- Neither history nor recent experience gives any support to the notion that urban migration can be stopped or even significantly slowed. Opposing migration and refusing to help the urban poor for fear of attracting additional migrants merely increases poverty and environmental degradation.
- A large proportion of urban growth, whether from migration or natural increase, is made up of the poor. But poor people have both a right to be in the city and an important contribution to make. This has to be a clear point of reference for urban policymakers.

- It is critical to support the individual and collective efforts of low-income residents to secure better homes and livelihoods in urban areas, and to give them the opportunity to participate in policy processes, as well as to negotiate solutions to their problems.

*Poverty, sustainability and land use:*

- Many cities could reduce social problems by planning ahead for the needs of the poor. In particular, poor people need serviced land to build and improve their own housing. In this, greater attention must be given to securing the property rights of women. Having a secure home and a legal address is essential for people to tap into what the city has to offer. The most effective way to achieve this is to provide land and services for the poor *before the fact*. This requires learning to live with inevitable growth and planning for it.
- Planning for the land needs of the poor is only one aspect of the broader issue of land use, which will become more urgent as the urban population grows. The aim should be to minimize the urban footprint by regulating and orienting expansion before it happens.
- The interactions between urban growth and sustainability will be particularly critical for humankind's future. Cities influence global environmental change and will be increasingly affected by it. This calls for a proactive approach, aimed at preventing environmental degradation and reducing the environmental vulnerability of the poor. It is particularly critical in developing countries, whose urban population will soon double, and in low-elevation coastal zones.<sup>5</sup>

*The critical importance of a proactive approach:*

- Given the prospects of urban growth, only proactive approaches to inevitable urban growth are likely to be effective. Minimizing the negative and enhancing the positive in urbanization requires both vision and a permanent concern for poverty reduction, gender equality and equity and environmental sustainability. It also requires good information and analysis, as the last section of this chapter shows.

## A Win/Win Approach: Social Development and Urban Growth

This Report has repeatedly described massive urban growth in developing regions as “inevitable”. The confluence and inertia of at least two dominant processes—globalization with its many economic and social ramifications, and population growth in rural and urban areas—make urban growth ineluctable during coming decades. This is particularly the case in Africa and Asia.

However, the speed and size of this inevitable urban growth is not fixed. If policymakers could reduce the intensity of population growth, they would have more time to address existing needs while preparing to deal with future increases in urban population.

Until now, attempts to slow urban growth have focused almost exclusively on reducing rural-urban migration, but they have rarely succeeded. Migrants keep on coming to the cities because they perceive, correctly, that, despite all the drawbacks, urban habitats offer more choices.

Attempts to slow migration fail to address the principal demographic component of urban growth, which is natural increase in urban areas (and, indirectly, in rural areas). As urbanization levels rise, natural increase accounts for a growing proportion of all urban growth. This pattern presents policymakers with an untapped win-win opportunity: reducing the rate of natural increase by improving the social conditions of the poor and advancing women's rights.

Reducing natural increase means improving the social and economic status of the poor, ensuring that quality reproductive health services are affordable and available, and empowering women. Together, these interventions influence individuals' fertility preferences and ability to meet them. Development empowers the exercise of human rights and gives people greater control over their lives.

There is also a clear positive linkage between development, women's empowerment and the ability to plan one's family effectively. Women who can decide for themselves the number and spacing of their children have more freedom to pursue work, education and community activities and to earn an income outside the home.<sup>6</sup>

Reducing the gender gap in education and health, and widening women's opportunities for more varied and

## 24 REPRODUCTIVE HEALTH, UNMET NEEDS AND NATURAL INCREASE

Almost one fifth of married women in developing countries have an unmet need for family planning services. This need is more than twice as high among adolescents as it is in the general population. It remains very high in most low-prevalence regions. High levels of unmet need for effective contraception have led to 70 to 80 million unintended pregnancies each year in developing countries. Addressing these preferences could reduce exposure to reproductive health risks and open possibilities for young women in education, employment and social participation.<sup>1</sup>

Such findings are of considerable relevance for urban growth. What would happen, for instance, if the urban poor were able to achieve their desired fertility levels? An illustrative exercise suggests that it would make a significant difference in the rate of growth of

urban populations in developing countries.<sup>2</sup> Demographic and Health Survey data from two countries (Bangladesh, 2004, and Colombia, 2005) were used to estimate what it would mean for fertility if women had perfect access to reproductive health services and achieved their desired fertility size.

Under these conditions, Colombia's projected urban population growth during the 2005-2025 period would be reduced from an average of 1.66 per cent per year to 1.21 per cent per year and its rural population growth would be reduced from -0.20 per cent to -0.83 per cent.

In Bangladesh, the projected urban growth rate would be reduced from 3.38 per cent to 3.05 per cent and its rural growth rate would be lowered even more, from 0.80 per cent to 0.39 per cent, during that period. A lower

rate of rural natural increase would evidently contribute to reducing rural-urban migration. This simulation is by no means a perfect representation of reality, but it is nevertheless suggestive.

A rise in age at marriage would also have an impact on natural increase. In most developing countries, childbearing takes place within marriage, making age at marriage a primary indicator of exposure to risk of pregnancy. Overall, among 20-24 year olds, 90 per cent of young women have their first births after marriage. In developing countries, between half and three quarters of all first births to married women are within the first two years of marriage.<sup>3</sup> An increase in the average age at marriage could be expected to have an important effect on fertility decline.

better-paid work, would encourage economic growth. Rising incomes, in turn, reduce gender inequality, but they do not break down all barriers to women's participation and development.

Advances in this domain have often been disappointing. Women continue to be disproportionately represented among the poor. Overall, economic liberalization may have had a negative effect on poverty reduction in general and on women in particular.<sup>7</sup> The evolution of the health sector is particularly disappointing.<sup>8</sup> Moreover, a World Bank study found that *services related to reproductive health are more inequitable than any other cluster of services*.<sup>9</sup> The public health sectors designed to protect poor women are failing them in many parts of the developing world.<sup>10</sup> Not surprisingly then, poor urban women's fertility is significantly higher than among non-poor urban women. Moreover, in the household, poverty inhibits the bargaining power of women who may not have the ability to implement their preferences as opposed

to their spouses'. This also plays into access to reproductive health information and services."

Policymakers have recognized the advantages of slowing down urban growth, but have not understood the costs and the limitations of efforts to prevent rural-urban migration. Successful urban growth reduction depends not on restricting people's right to migrate, but on empowering people and facilitating the exercise of their basic human rights, including the right to reproductive health.

### A Better Information Base for Decision-making<sup>12</sup>

Effective governance and management in the changing social and environmental context of expanding urban areas call for reliable and updated information and analysis. Inputs from the population field can play a key role here.

Sociodemographic information can be used to address two complementary agendas: a) improvement of social policy aimed at poverty reduction; and b) generating a broader vision for the sustainable use of space and the

## 25 COMMUNITY SURVEYS AND MAPPING FOR IMPROVEMENTS

Communities of the urban poor and supporting non-governmental organizations (NGOs) are documenting their own living conditions, assets and needs. In the process, they are building knowledge among and about the community and strengthening community groups. They are also building relationships amongst community residents and establishing the community as a formal stakeholder in the city's political and planning processes.<sup>1</sup>

### Phnom Penh, Cambodia

Starting out as a savings group in 1994, the Solidarity and Urban Poor Federation in Phnom Penh has carried out a number of surveys to gather and analyse community data, including population size and density; occupations and incomes; shelter location and risk; tenancy; avail-

ability and method of securing water and power and sanitation.<sup>2</sup>

### Nairobi, Kenya

A federation of the urban poor in Kenya, Muungano wa Wanvijiji, works closely with a supporting NGO, Pamoja Trust, to develop their own plans to obtain basic services and security of tenure. In the settlement of Huruma, Pamoja and federation members from the Huruma villages of Kambi Moto, Mahiira, Redeemed, Ghetto, and Gitathuru carried out a community survey and mapping exercise with the Nairobi City Council. Residents of Huruma themselves collected all the data, which included information on population figures and household size; tenancy; income strategies and household expenditures, as well as water and sanitation

access and use. The survey and mapping were the first step in the process of regularizing of these settlements.<sup>3</sup>

### Dar es Salaam, United Republic of Tanzania

The Manzese Ward and UN-Habitat's Safer Cities Programme worked with women to identify what elements of the city rendered it hostile to their safety and free movement. Following a two-day consultation and exploratory walk, a violence map was drawn up, specific recommendations were made to upgrade the entire settlement, from better lighting and pathway access, to monitoring local bars, guest-houses and other small businesses. They also identified the need for local-level recourse for domestic violence and petty crimes.<sup>4</sup>

provision of land for the shelter needs of the poor. In the hands of the right people—which in many cases will be groups of the urban poor themselves—good information can help drive both of these agendas.

### INFORMATION FOR THE EXERCISE OF HUMAN RIGHTS

Poor people lack power to make their voices heard by policymakers. Many are effectively invisible to urban policymakers: Official information systems do not accurately register their existence or where they live, and many municipal governments lack information on irregular areas of settlement. Invisibility means less investment, inaccessible schools and health posts, high absentee rates for doctors and teachers assigned to poor districts and a significant social distance between service providers and their clients.<sup>13</sup>

Sociodemographic data must be spatially disaggregated (organized by district) in order to have any real impact. Sex-disaggregated data, gender analysis and gender-responsive budgeting are also critical to meet women's needs and enable all members of society to realize their

potential. Gender-based constraints, as well as opportunities, influence access to income and assets, housing, transport and basic services; yet urban planning often ignores this differentiation, reducing the social and economic benefits cities could offer to both men and women.

Public officials need good, clearly presented and disaggregated information to fill gaps in services, especially in fast-growing neighbourhoods. Civil society, the media and the general public need the same information to understand their rights, formulate their demands, keep pressure on planners and politicians and monitor their response.

Participatory approaches are designed to generate community involvement in development and give people some control over different types of development projects. Fortunately, recognition is rising, especially in poor urban areas, that the participation of poor men and women in the decisions that affect them is critical.<sup>14</sup> Women among the urban poor have often been the pioneers of grassroots organizations to address community needs and push for change; these have developed into effective social movements.<sup>15</sup>

Knowledge empowers people and has long-term implications for planning. “Participatory mapping” and budgeting can improve awareness, show communities what public services are available and who uses them, and improve local control.<sup>16</sup> Community surveying and mapping is most important for organizations of the urban poor (see Box 25).

Policymakers also need disaggregated intra-urban information to address the needs of the poor more efficiently. This can help to ensure a balanced and equitable distribution of resources; build indicators for quality control; select whom to include or exclude from a programme; and allow adjustments in the location of agencies, distribution of employees and communication strategies.

Demographic dynamics, such as patterns of growth and age structure, vary widely within cities and may challenge social policy management.

Correctly identified, these variations can improve decisions on the allocation of health and education policies, as well as help to develop more general urban intervention initiatives. However, there are several obstacles that require new approaches.

High levels of irregular land occupation limit local governments’ ability to obtain sound data. Shantytowns and informal settlements frequently change shape as the result of invasions and evictions. Records are incomplete precisely because of inadequate public services.

Most developing-country planners and managers do not yet have access to fine resolution intra-urban data and indicators, though there has been some progress using geographic information system (GIS) techniques for the mapping of census enumeration areas.

Spatially-disaggregated information allows policymakers to deal with one of the most complex issues of urban administration—choosing where to act: areas with the greatest distortions between supply and demand and those which present cumulative negative social indicators. This kind of analysis is even more necessary as decentralization proceeds.

Every stakeholder recognizes the importance of information for decision-making. Donor countries, international organizations and non-governmental organizations (NGOs), however, have not yet given priority to the practical aspects of understanding the actual and potential demand for information, organizing information systems that can respond to these demands and forming groups to manage these information systems.<sup>17</sup>

Social policymakers in countries constrained by lack of resources sometimes perceive rational decision-making based on good information as a luxury. International institutions can help convince them that this is not the case; they can also support the generation of data, tools and analyses to clarify needs and suggest choices. Box 26 provides a good example of this kind of contribution.

The argument that information is essential for

improving social services supports a worldwide trend to evidence-based policymaking. However, much effort is still needed to understand the growing complexity of the urban arena in developing countries and the information systems required to support decentralized social policies.

The challenges are considerable.

Urban administrations in developing countries frequently make decisions on very short notice, without time to develop sophisticated analyses. Institutional instability often undermines informational or research projects.<sup>18</sup> There are technical problems, such as inconsistencies between the units of analysis used in demographic censuses or surveys and those required by potential users. Technical teams tend to be small, ill-trained and ill-equipped. Better-equipped teams often create information systems for which there is no demand.

Information systems vary a great deal from project to project. There are no common standards, and national and international agencies sometimes fail to exchange resources and information with one another. Donor packages sometimes do not respond to local needs or to specific management problems, which leads to duplication and misuse of information. As a result, long-term impact and project sustainability can be a major problem.

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## 26 FACING THE CHALLENGES OF DECENTRALIZATION IN HONDURAS

In 1990, facing decentralization, the municipal Government of San Pedro Sula in Honduras requested UNFPA's help in setting up a research and statistics unit. At the time, authorities knew very little about the city's population dynamics except that it was growing quickly.

UNFPA supported training of local staff and helped officials to understand the role of population dynamics in local and regional development. A base map showing land use down to the individual housing unit was prepared and used as basis for a low-cost household census, as well as a detailed survey of population and social indicators. A system for monitoring fertility, infant mortality and reproductive health risks was established. A multi-disciplinary database

was created and shared with a variety of municipal, national and international groups, including the Inter-American Development Bank.

The telecommunications giant AT&T cooperated with the project to expand telephone service to 32 towns and cities. As a *quid pro quo* for using project data, AT&T financed two international HIV/AIDS and reproductive health workers and agreed that all information generated with their support would remain in the public domain.

This type of collaboration enabled the project to improve the quality of its base maps, digitizing "island" maps and eventually creating a single georeferenced base map for the whole city. The city's own bureaux of land manage-

ment, water management and sanitation used these base maps for their own operations.

The success of the project drew other municipalities facing decentralization to emulate it. The project successfully cooperated with a range of central and local government bodies, the private sector, NGOs, academia, bilateral donors and international agencies. Activities were extended at the local level into HIV/AIDS prevention, as well as other aspects of reproductive health, gender and environment. Most important, information was shared with the local communities, allowing them to participate more actively and with better information in political processes.

In order to perform effectively, social policy managers need access to demographic information systems that not only include data on supply distribution—such as equipment, allocated professionals and existing services—but also enable the comparison of such distribution structures with the needs of local men and women.

Meeting needs stemming from decentralization will also require capacity-building at the local level. Professionals who work on decentralized planning now have to be prepared to analyse demographic phenomena (fertility, mortality, migration, age and sex composition) in spatial terms, using such tools as GIS and satellite imagery. Moreover, they need to be prepared to engage with civil society and to help local groups gain access to information and information systems.

Over the years, UNFPA has consistently supported data gathering. The Fund could further strengthen decentralized planning by reinforcing local capacity to generate, analyse and use population data for local development. This training should go beyond the mere manipulation of data and involve a technical understanding and capacity

to develop policy proposals regarding major local planning issues, such as land use and territorial planning, housing, transportation and basic social service provision.

### PLANNING FOR THE SOCIAL AND SUSTAINABLE USE OF SPACE

The population field can play a key role in drawing attention to the bigger picture of demographic changes over the longer term and in preparing for considerable urban growth in developing countries. Policy steps to help reduce the social and environmental costs of urban expansion include:

- **Orienting future urban expansion.** Using demographic data together with satellite images and other spatial data in a GIS can help orient urban expansion of a given locality or group of localities in more favourable directions. Projections of demographic growth trends, used in conjunction with other data—for example, on elevation, slope, soils, land cover, critical ecosystems and hazard risks—can help policymakers identify areas in which future settlement

should be promoted or avoided. To be useful in a GIS, census data need to be available at the scale of the smallest spatial unit possible (in many cases, the census tract).

- **Generating early-warning indicators.** Early-warning indicators can be used to alert planners to unexpected urban expansions. Updated information on the broader dynamics of urban expansion and environmental protection needs is critical for responsible urban governance. Precarious and informal settlements need to be identified as they spring up. Aerial photos and satellite images are increasingly used to complement intercensus population estimates.
- **Planning infrastructure and housing policies.** The presence of roads, public transport, power and water supplies helps determine the direction in which cities grow. Their development should be oriented in accordance with environmental and demographic criteria. Information on demographic trends and commuting patterns can help predict increased pressure on housing, as well as on the road and street system.
- **Identifying populations at risk.** Information on the location, gravity and frequency of environmental risks is a basic planning tool for any city. Informal urban settlements face heightened risks from events such as floods, earthquakes and landslides. Health hazards also abound, because of overcrowding and poor infrastructure, but also because settlements grow up in unhealthy places near polluted bodies of water, solid waste landfills or polluting industries. Specific risks depend not only on location, but also on residents' level of information and on the building materials and overall quality of their housing.
- **Planning for parks and walkways.** Urban public parks and walkways are sometimes considered a luxury that cities in poor countries can ill afford, but open spaces contribute to individual well-being and physical fitness. They can help promote equity in important domains of city life (see Box 27). Urban trees have important environmental benefits such as filtering air pollutants, attenuating the

urban heat-island effect and improving water quality. The same GIS tools mentioned above can identify areas for green space preservation, either before they are developed or as part of comprehensive urban renewal.

## 27 PUBLIC SPACE: THE GREAT EQUALIZER<sup>1</sup>

Doubling the urban population of developing countries in a few decades can be an opportunity to imagine new designs and organizational schemes to make cities more humane and more equitable. When elected Mayor of Bogotá in 1998, Enrique Peñalosa acknowledged that income inequality is endemic to market economies. However, he believed that “quality of life equality” could be enhanced by making public interests prevail over private interests in urban areas.

Peñalosa held that a city's transport system is critical to equality. Public transport must take priority over private cars for democracy and the public good to prevail. He considered highways to be monuments to inequality, built with funds diverted from the more important needs of the poor, only to cater to a small minority of the affluent. The city thus rejected a plan for a system of expressways in favour of mass transit, pedestrian access and bicycle paths. A chaotic system of private buses was replaced by a spider-web system in which local buses feed dedicated express lines and move passengers at a rapid pace. Barriers along the streets restored sidewalks to pedestrians, and restrictions removed 40 per cent of cars from the streets during peak hours. Several hundred kilometres of dedicated bicycle paths were also built.

The Mayor observed that income differences are most acutely felt during leisure time: While upper income citizens have access to large homes, gardens and country clubs, lower-income people and their children live in cramped homes and have public spaces as their only leisure option. Believing that quality public pedestrian space at least begins to redress inequality, Peñalosa improved access to green spaces, waterfronts and public walking spaces.

Predictably, these and other equity-generating initiatives spawned powerful opposition. But in the end, Bogotá has shown that much can be done for the promotion of equity through the strategic use of public space. As their urban population doubles, policymakers in developing countries also have a window of opportunity to use public space as the great equalizer. It is the only place where all citizens meet as equals in cities.

## Preparing the Urban Transition: A Last Word

The anti-urban policies common in the developing world during the last quarter-century misapprehend both the challenges and the opportunities of urban growth. Urban poverty is unquestionably an important and growing problem in many developing countries. Environmental problems are increasingly clustered in urban sites. Yet to blame cities for poverty and environmental problems is to miss the point. Dispersing or deconcentrating population and economic activities would not bring relief—even if it were possible.

For humankind to benefit from the urban transition, its leaders must first accept it as both inevitable and important for development. They must recognize the right of the poor to what the city has to offer and the city's potential to benefit from what the poor have to bring.

Rather than attempting in vain to prevent urban expansion, planners must objectively examine the available policy options for addressing it and building on its possibilities. Urban improvement and slum upgrading draws a lot of attention from city governments and urban

planners. Such action is necessary, but it is not enough: Cities must look urgently to the future.

The projected expansion of the urban population in Asia and Africa, from 1.7 to 3.4 billion over a period of only 30 years, and the reduced level of available resources, stress the need for a more imaginative but pragmatic response. In turn, this will demand a realistic vision for the future, better information at the local and regional level, as well as participatory approaches and negotiated agreements that build on the knowledge and experience of the poor.

Decisions taken today in cities across the developing world will shape not only their own destinies but the social and environmental future of humankind. The approaching urban millennium could make poverty, inequality and environmental degradation more manageable, or it could make them exponentially worse. In this light, a sense of urgency has to permeate efforts to address the challenges and opportunities presented by the urban transition.

# Notes and Indicators

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## INTRODUCTION

- 1 United Nations. 1995. *Population and Development, vol. 1: Programme of Action adopted at the International Conference on Population and Development: Cairo: 5-13 September 1994*, para. 9.14. New York: Department of Economic and Social Information and Policy Analysis, United Nations.
- 2 UN Millennium Project. 2005. *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals*, p. xix. Report to the UN Secretary-General. London and Sterling, Virginia: Earthscan.
- 3 See: UN-Habitat. 2006. *State of the World's Cities 2006/7: The Millennium Development Goals and Urban Sustainability*. London: Earthscan. Moreover, Worldwatch's latest annual Report provides a valuable portrayal of major urban problems as well as a number of promising approaches. (See: Worldwatch Institute. 2007. *State of the World 2007: Our Urban Future*. New York and London: W. W. Norton and Company.)

## CHAPTER 1

- 1 Excerpt courtesy of: Anderson Literary Management, Inc. 13 November 2006. "The Megacity," copyright 2006 © by George Packer. *The New Yorker* 82(37): 64.
- 2 UNFPA. 1996. *The State of World Population 1996: Changing Places: Population, Development and the Urban Future*, p. 1. New York: UNFPA.
- 3 This crossover date is based on the latest UN estimate. Unless otherwise mentioned, all data referring to the analyses of urbanization trends provided in this Report are based on: United Nations. 2006. *World Urbanization Prospects: The 2005 Revision*. New York: Population Division, Department of Economic and Social Affairs, United Nations.
- 4 United Nations. 1995. *Population and Development, vol. 1: Programme of Action adopted at the International Conference on Population and Development: Cairo: 5-13 September 1994*, Section 9.1. New York: Department of Economic and Social Information and Policy Analysis, United Nations.

- 5 UN Millennium Project. 2005. *A Home in the City*. Task Force on Improving the Lives of Slum Dwellers. London and Sterling, Virginia: Earthscan.
- 6 The characteristics and limitations of the United Nations database have been amply discussed in the literature. See, for instance: Montgomery, M. R., et al., Panel on Urban Dynamics, National Research Council (eds.). 2003. *Cities Transformed: Demographic Change and Its Implications in the Developing World*, pp. 128-153. Washington, D.C.: National Academies Press; and Satterthwaite, D. 2005. *The Scale of Urban Change Worldwide 1950-2000 and Its Underpinnings*. Human Settlements Discussion Paper. No. Urban01. London: International Institute for Environment and Development.
- 7 Satterthwaite, D. 2006. *Outside the Large Cities: The Demographic Importance of Small Urban Centres and Large Villages in Africa, Asia and Latin America*, p. 1. Human Settlements Discussion Paper. No. Urban03. London: International Institute for Environment and Development.
- 8 Cohen, B. 2006. "Urbanization in Developing Countries: Current Trends, Future Projections, and Key Challenges for Sustainability." *Technology in Society* 28(1-2): 63-80.
- 9 The trends discussed herein are based on the official United Nations estimates and projections. (See: United Nations 2006.) It is important to emphasize that these projections are not predictions. The broad trends presented in this section are based on solid evidence, but their actual levels may vary. Many factors can change the trajectory of urban growth over time. Reviews of projections from recent decades show that they have tended to overstate urban growth, especially in larger cities. Most policymakers would welcome a reduction in the rate of future urban growth. The mechanics of such a potential decline are discussed in Chapter 6.
- 10 Satterthwaite 2005.
- 11 "In most cases, high growth rates are an indicator of success rather than failure and most of the world's largest cities are located in countries with the world's largest economies." — Cohen 2006, p. 69.

- 12 On the other hand, even a modest rate of growth in a large city can mean a large absolute increase in population. That is, a 2 per cent annual increase in the population of Mumbai will mean a much larger increment of urbanites than a 10 per cent annual increase in a smaller city.
- 13 "We cannot recall a case in which a small city was the focus of an editorial lamenting rapid urban growth or the lack of public services. Nevertheless, the combined size of such cities makes them very significant presences in developing countries." — Montgomery, M. R., et al., Panel on Urban Dynamics, National Research Council (eds.) 2003, p. 15.
- 14 UNCHS (Habitat). 2000. *Women and Urban Governance*, p. 3. Policy Dialogue Series. No. 1. Nairobi: UNCHS (Habitat).
- 15 "Globalization has allowed individual cities to break away from the fate of their national economies. Increasingly success or failure depends on the ability of municipal governments to capitalize on the assets of the local environment and to provide the modern infrastructure, enabling environment, and low-wage, flexible workforce demanded by modern businesses." — Cohen, B. 2004. "Urban Growth in Developing Countries: A Review of Current Trends and a Caution Regarding Existing Forecasts," p. 37. *World Development* 32(1): 23-51.
- 16 The diseconomies of agglomeration, population density, environmental pollution, labour problems and the economic extension of the dominant centre can reduce the advantages of large cities. Advances in telecommunications, transportation and production technologies from globalization can favour de-concentration away from central cities. Industries that require a large workforce can decline, thereby eroding a main economic reason for concentration, that is, to minimize the costs of transport, knowledge, training and information.
- 17 UNRISD. 2005. *Gender Equality: Striving for Justice in an Unequal World*, p. 193. Geneva: UNRISD.
- 18 This section is based on: Rodriguez, J., and G. Martine. 2006. "Urbanization in Latin America: Experiences and

- Lessons Learned." Draft paper prepared for this Report.
- 19 This section is based on: ESCWA Social Development Division. 2007. "Urbanization in the Western Asia Region." Draft paper prepared for this Report.
- 20 Ibid. Some countries, such as Egypt, Jordan and the Syrian Arab Republic, for example, are beginning to take positive steps in aiding informal settlements.
- 21 This discussion is based on: White, M. J., B. U. Mberu, and M. Collinson. 2006. "African Migration and Urbanization: Recent Trends and Implications." Draft paper prepared for this Report.
- 22 White, M. J., and D. P. Lindstrom. 2005. "Internal Migration." Ch. 11 in: *Handbook of Population*, edited by D. Poston and M. Micklin. 2006. *Handbooks of Sociology and Social Research Series*. New York: Springer.
- 23 This discussion is drawn in large part from: Chandrasekhar, S. 2006. "Urban Growth Patterns and Its Implications for Future Economic, Social, Demographic and Environmental Scenarios in India." Draft paper prepared for this Report.
- 24 Government of India. n.d. National Rural Employment Guarantee Act: 2005. New Delhi: Ministry of Rural Development, Government of India. Website: <http://nrega.nic.in/>, accessed 17 January 2006.
- 25 This section is based on: Bai, X. 2006. "Urban Transition in China: Trends, Consequences, and Policy Implications." Draft paper prepared for this Report.
- 26 Chen, N., P. Valente, and H. Zlotnik. 1998. "What Do We Know about Recent Trends in Urbanization?" Pp. 59-88 in: *Migration, Urbanization, and Development: New Directions and Issues*, edited by R. E. Bilborrow. 1998. New York: UNFPA.
- 27 Sivaramakrishnan, K. C., Amitabh Kundu, and B. N. Singh. 2005. *Handbook of Urbanization in India: An Analysis of Trends and Processes*, Table 3.4. New Delhi and New York: Oxford University Press.
- 28 Rodriguez and Martine 2006.
- 29 In China, uncommonly strong bureaucratic controls over fertility have kept natural increase at low

- levels over several decades. Meanwhile, similarly strong restrictions on rural-urban migration kept urbanization levels low until the late 1970s. Loosening of migration restraints have resulted in massive movements to cities in the face of continued low rates of natural increase.
- 30 Few governments have made direct reference to this connection between urban growth and natural increase and to the need for greater attention to reproductive health. Policymakers generally allude only to unwanted rural-urban migration.
- ## CHAPTER 2
- 1 United Nations. 2006. *Implementation of the Outcome of the United Nations Conference on Human Settlements (Habitat II) and Strengthening of the United Nations Human Settlements Programme (UN-Habitat): Report of the Secretary General (A/61/262)*, para. 8. New York: United Nations.
  - 2 United Nations. 1995. *Population and Development, vol. 1: Programme of Action adopted at the International Conference on Population and Development: Cairo: 5-13 September 1994*, para. 9.14. New York: Department of Economic and Social Information and Policy Analysis, United Nations.
  - 3 This chapter benefits in many ways from a valuable contribution made to this Report by UN-Habitat (See: Bazoglu, N., and Mboup, G. 2007. "Shelter and Urban Poverty: Nature and Scope." Draft paper prepared for this Report.).
  - 4 Kessides, C. 2006. *The Urban Transition in Sub-Saharan Africa: Implications for Economic Growth and Poverty Reduction*. Africa Region Working Paper Series. No. 97. Washington, D. C.: Cities Alliance.
  - 5 Champion, T., and G. Hugo. 2004. "Introduction: Moving Beyond the Urban-Rural Dichotomy." Ch. 1 in: *New Forms of Urbanization: Beyond the Urban-Rural Dichotomy*, edited by T. Champion and G. Hugo. Aldershot, United Kingdom: Ashgate; Njoh, A. J. 2003. "Urbanization and Development in Sub-Saharan Africa." *Cities* 20(3): 167-174; and UN-Habitat. 1996. *An Urbanizing World: Global Report on Human Settlements 1996 (HS/397/96A)*. Oxford: Oxford University Press.
  - 6 Figures on urban poverty are imprecise and often underestimated because many aspects of poverty are simply not measured. Surveys either fail to consider the specificity of urban conditions (for instance, the inability to grow or forage for food, the higher monetary cost of non-food needs, the higher incidence of homelessness, harassment, eviction or arrest in their "illegal" homes or livelihoods), or present incomplete information (for instance, by not measuring the adequacy of sanitation facilities). Official UN statistics suggest that, in 2005, there were some 998 million people living in "slums" in the world. See: UN-Habitat. 2006a. *State of the World's Cities 2006/7: The Millennium Development Goals and Urban Sustainability*, p. 16. London: Earthscan.
  - 7 Satterthwaite, D. 2004. *The Under-estimation of Urban Poverty in Low- and Middle-Income Nations*. IIED Working Paper on Poverty Reduction in Urban Areas. No. 14. London: International Institute for Environment and Development.
  - 8 UNCHS (Habitat). 2001. *State of the World's Cities 2001*. Nairobi: UNCHS (Habitat).
  - 9 UN-Habitat 2006a.
  - 10 UNDP. 2006a. *Making Progress on Environmental Sustainability: Lessons and Recommendations from a Review of Over 150 MDG Country Experiences*, pp. 47 and 50. New York: UNDP.
  - 11 UN Millennium Project. 2005a. *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals*, p. xix. Report to the UN Secretary-General. London and Sterling, Virginia: Earthscan
  - 12 Montgomery, M. 2005. "The Place of the Urban Poor in the Cairo Programme of Action and the Millennium Development Goals," p. XXIV-5. Ch. 24 in: *United Nations Seminar on the Relevance of Population Aspects for the Achievement of the Millennium Development Goals: New York: 17-19 November 2004 (ESA/P/WP.192)*, by the United Nations. 2005a. New York: Population Division, Department of Economic and Social Affairs, United Nations.
  - 13 See: McGranahan, G., et al. 2001. *The Citizens at Risk: From Urban Sanitation to Sustainable Cities*. London: Earthscan.
  - 14 Bartone, C. R. 2001. "Urban Environmental Management and the Poor." Environmental Strategy Background Paper, Urban Development, Infrastructure Group. Washington, D.C.: World Bank. Website: [http://wbIn0018.worldbank.org/lac/envstrategy/ar/cover.nsf/0/40451d0d0edfa24f85256a0e005aa2e1/\\$FILE/ENV-Urban-Jan01.doc](http://wbIn0018.worldbank.org/lac/envstrategy/ar/cover.nsf/0/40451d0d0edfa24f85256a0e005aa2e1/$FILE/ENV-Urban-Jan01.doc), last accessed 29 November 2006.
  - 15 UNDP. 2006b. *Human Development Report 2006: Beyond Scarcity: Power, Poverty and the Global Water Crisis*. New York: Palgrave MacMillan.
  - 16 Mboup, G. 2004. "Cost of Water by Welfare Groups in Addis Ababa: Indicators for Accessibility, Affordability and Non-discrimination." Paper presented at the Right to Water and Indicators Workshop, Heinrich Boell Foundation, Berlin, Germany, 25-26 October 2004; UN-Habitat. 2004. "The Preliminary Report of the Urban Inequities Survey, Addis Ababa." Nairobi: UN-Habitat; and UN-Habitat 2006a.
  - 17 African Population and Health Research Center, Inc. 2002. *Population and Health Dynamics in Nairobi's Informal Settlements*. Nairobi: African Population and Health Research Center, Inc.
  - 18 Montgomery, M. R., et al., Panel on Urban Dynamics, National Research Council (eds.). 2003. *Cities Transformed: Demographic Change and Its Implications in the Developing World*, p. 82. Washington, D.C.: National Academies Press.
  - 19 UN-Habitat 2004.
  - 20 Thompson, J., et al. 2000. "Waiting at the Tap: Changes in Urban Water Use in East Africa over Three Decades." *Environment and Urbanization* 12(2): 37-52 Cited in: Kessides 2006, p. 18.
  - 21 United Nations 1995, Objective 3.16.
  - 22 UNDP. 2003. *Human Development Report 2003: Millennium Development Goals: A Compact among Nations to End Human Poverty*, p. 85. New York: Oxford University Press.
  - 23 Basu, A. 2002. "Why does Education Lead to Lower Fertility: A Critical Review of Some of the Possibilities." *World Development* 30(10): 1779-1790.
  - 24 UN-Habitat. 2007. Urban Indicators Database. Nairobi: UN-Habitat.
  - 25 UN-Habitat 2006a.
  - 26 Heintz, J. 2006. "Globalization, Economic Policy and Employment: Poverty and Gender Implications," p. 15. Employment Strategy Papers. No. 2006/3. Geneva: ILO.
  - 27 UNRISD. 2005. *Gender Equality: Striving for Justice in an Unequal World*, p. 53. Geneva: UNRISD.
  - 28 Kabeer, N., and S. Mahmud. 2004. "Globalization, Gender, and Poverty: Bangladeshi Women Workers in Export and Local Markets." *Journal of International Development* 16(1): 93-109; Beneria, L. 2003. *Gender, Development and Globalization: Economics as if All People Mattered*. London: Routledge; Elson, D. 1996. "Appraising Recent Developments in the World Market for Nimble Fingers." Pp. 35-55 in: *Confronting State, Capital, and Patriarchy: Women Organizing in the Process of Industrialization*, edited by A. Chhachhi and R. Pittin. 1996. New York: St. Martin's Press; and Elson, D., and R. Pearson. 1981. "Nimble Fingers make Cheap Workers: An Analysis of Women's Employment in Third World Export Manufacturing." *Feminist Review* 7: 87-107. All cited in: Heintz 2006, p. 45.
  - 29 Chen, M., et al. 2005. *Progress of the World's Women 2005: Women, Work and Poverty*. New York: UNIFEM; Carr, M., M. A. Chen, and J. Tate. 2000. "Globalization and Home-Based Workers." *Feminist Economics* 6(3): 123-42; and Chen, M., J. Sebstad, and L. O'Connell. 1999. "Counting the Invisible Workforce: The Case of Homebased Workers." *World Development* 27(3): 603-610. All cited in: Heintz 2006, p. 54.
  - 30 AFL-CIO. n.d. "Women in the Global Economy." Washington, D.C.: AFL-CIO. Website: [www.aflcio.org/issues/jobseconomy/globaleconomy/women/](http://www.aflcio.org/issues/jobseconomy/globaleconomy/women/), accessed 16 February 2007.
  - 31 UN-Habitat 2006a, p. 125.
  - 32 Ibid., p. 9.
  - 33 Heintz 2006, p. 1.
  - 34 Ibid., p. 11.
  - 35 International Center for Research on Women. May 2006. "Reducing Women's and Girls' Vulnerability to HIV/AIDS by

- Strengthening their Property and Inheritance Rights." *ICRW Information Bulletin*. Washington, D.C.: International Center for Research on Women. (The International Center for Research on Women [ICRW], in partnership with the Global Coalition on Women and AIDS [GCWA/UNAIDS] and the United Nations Food and Agriculture Organization [FAO], is implementing the Reducing Women's and Girls' Vulnerability to HIV/AIDS by Strengthening their Property and Inheritance Rights grants programme.)
- 36 International Center for Research on Women. June 2004. "To Have and To Hold: Women's Property and Inheritance Rights in the Context of HIV/AIDS in Sub-Saharan Africa." *ICRW Information Bulletin*. Washington, D.C.: International Center for Research on Women.
- 37 Michaud, A. 2002. "How Gender-sensitive is Your City?" in *Habitat Debate* 8(4): 9-10.
- 38 See: Inter-Parliamentary Union. 2007. "Women in National Parliaments: Situation as of 31 January 2007." Geneva: Inter-Parliamentary Union. Website: <http://www.ipu.org/wmn-e/world.htm>, accessed 12 February 2007.
- 39 United Cities and Local Governments. 2005. "Local Government Statement to Beijing+10: Women in Local Decision Making: Leading Global Change." Barcelona, Spain: United Cities and Local Governments. Website: <http://www.cities-local-governments.org/uclg/index.asp>, accessed 21 February 2007.
- 40 Chen, et al. 2005.
- 41 WHO. 2005. "What Evidence is there about the Effects of Health Care Reforms on Gender Equity, Particularly in Health," p. 10. Health Evidence Network Report. Copenhagen: Regional Office for Europe, WHO.
- 42 See: UNFPA and the Population Reference Bureau. 2005. *Country Profiles for Population and Reproductive Health: Policy Developments and Indicators 2005*, p. 10. New York and Washington, D.C.: UNFPA and the Population Reference Bureau.
- 43 Montgomery, M. R., et al., Panel on Urban Dynamics, National Research Council (eds.) 2003, p. 82.
- 44 Montgomery, M. 2004. "The Place of the Urban Poor in the Cairo Programme of Action and the Millennium Development Goals," p. 7. Paper presented at the Seminar on the Relevance of Population Aspects for the Achievement of the Millennium Development Goals, New York, 17-19 November 2004, Population Division, Department of Economic and Social Affairs, United Nations.
- 45 Montgomery, M. R., et al., Panel on Urban Dynamics, National Research Council (eds.) 2003, p. 82.
- 46 Montgomery 2004, p. 1.
- 47 Smaoun, S. 2005. "Even in the Best of Times, Women Are Constantly in Danger." *Habitat Debate* 11(1): 7.
- 48 UNFPA. 2006. "Women's Economic Empowerment: Meeting the Needs of Impoverished Women," p. 17. Workshop Report. New York: UNFPA.
- 49 Kishor, S., and K. Johnson. 2004. *Profiling Domestic Violence: A Multi-Country Study*, p. 39. Calverton, Maryland: Measure DHS and ORC MACRO.
- 50 Smaoun, S. 2000. "Violence Against Women in Urban Areas: An Analysis of the Problem from a Gender Perspective," pp. 29-30. Urban Management Programme Working Paper Series. No. 17. Nairobi, Kenya: UN-Habitat.
- 51 *Ibid.*, pp. 31-32.
- 52 Hindin, M. J., and L. S. Adair. 2002. "Who's at Risk: Factors Associated with Intimate Partner Violence in the Philippines." *Social Science and Medicine* 55(8): 1385-1399.
- 53 McCloskey, L. A., C. Williams, and U. Larsen. 2005. "Gender Inequality and Intimate Partner Violence among Women in Moshi, Tanzania." Paper presented at the Twenty-fifth IUSSP International Population Conference, Tours, France, 18-23 July 2005. Paris: International Union for the Scientific Study of Population.
- 54 UNFPA and the Population Reference Bureau 2005, p. 10.
- 55 UN Millennium Project. 2006. *Public Choices, Private Decisions: Sexual and Reproductive Health and the Millennium Development Goals*, p. 3. New York: UNDP.
- 56 *Ibid.*, p. 12.
- 57 Montgomery 2004, p. 9.
- 58 Bazoglu and Mboup 2007; and UNFPA and the Population Reference Bureau 2005, p. 10.
- 59 See: Montgomery 2004; and UN Millennium Project 2006, p. 3.
- 60 UN-Habitat 2006a, p. 16.
- 61 Mosley, W. H., and L. C. Chen. 1984. "An Analytical Framework for the Study of Child Survival in Developing Countries." Pp. 25-45 in: *Child Survival: Strategies for Research. Population and Development Review* 10 (Supplement).
- 62 Buvé, A., K. Bishikwabo-Nsarhaza, and G. Mutangadura. 2002. "The Spread and Effect of HIV-1 Infection in Sub-Saharan Africa." *The Lancet* 359(9324): 2011-2017.
- 63 UN-Habitat 2006a, Figure 3.4.1.
- 64 Miranda, D. de S. 2000. "Reflexões sobre o papel da cultura na Cidade de São Paulo." *São Paulo em Perspectiva* 14(4): 105-110.
- 65 For further readings on urbanization and culture, see: Massey, D. S. 1996. "The Age of Extremes: Concentrated Affluence and Poverty in the Twenty-first Century," p. 409. *Demography* 33(4): 395-412; Gill, R. 2000. "Cities and Ethnicity: A Case of De-Ethnicization or Re-Ethnicization?" *Sociological Bulletin* 49(2): 211-228; and Roy, S. K. 2005. "Urban Development: A Critique." *Journal of the Indian Anthropological Society* 40(2-3): 209-226.
- 66 Reader, I. 1989. "Review Article: Recent Japanese Publications on Religion," p. 300. *Japanese Journal of Religious Studies* 16(4): 299-315.
- 67 For further discussion of new religious movements, see: Ellingsen, T. 2004. "The Resurgence of Religion in the Age of Globalization," p. 4. Paper presented at the 5th Pan-European International Relations Conference: "Constructing World Orders," the Hague, the Netherlands, 9-11 September 2004. Colchester, United Kingdom: European Consortium on Public Relations Standing Group on International Relations; Dawson, L. L. 1998. "The Cultural Significance of New Religious Movements and Globalization: A Theoretical Prolegomenon," p. 584. *Journal for the Scientific Study of Religion* 37(4): 580-595; and Emerson, M. O., and D. Hartman. 2006. "The Rise of Religious Fundamentalism," p. 133. *Annual Review of Sociology* 32: 127-144.
- 68 Moser, C. O. N. 2004. "Urban Violence and Insecurity: An Introductory Roadmap." *Environment and Urbanization* 16(2): 3-16; Moser, C. O. N., and C. McIlwaine. 2006. "Latin American Urban Violence as a Development Concern: Towards a Framework for Violence Reduction," p. 42. *World Development*. 34(1): 89-112; Arriagada, I., and L. Godoy. 2000. "Prevention or Repression: The False Dilemma of Citizen Security", p. 113. *CEPAL Review*. No. 70. Santiago, Chile: Economic Commission for Latin America and the Caribbean; and Rolnik, R. 2001. "Territorial Exclusion and Violence: The Case of the State of São Paulo, Brazil." *Geoforum* 32(4): 471-482.
- 69 Hagedorn, J. M. 2005. "The Global Impact of Gangs," p. 160. *Journal of Contemporary Criminal Justice* 21(2): 153-169.
- 70 Estimate by the Inter-American Development Bank (IDB). See: Burki, J. S., and G. Perry. 1998. *Beyond the Washington Consensus: Institutions Matter*, p. 23. Washington, D.C.: The World Bank. Cited in: *Crime, Democracy, and Development in Latin America*, p. 1, by W. C. Prillaman. 2003. Policy Papers on the Americas Series. Vol. 14, Study 6. Washington, D.C.: Center for Strategic and International Studies.
- 71 Briceño-León, R. 2005. "Urban Violence and Public Health in Latin America: A Sociological Explanatory Framework," p. 1644. *Cadernos Saúde Pública* 21(6): 1629-1648; and Moser, C. O. N., and D. Rodgers. 2005. *Change, Violence and Insecurity in Non-Conflict Situations*, p. vi. Working Paper. No. 245. London: Overseas Development Institute.
- 72 Moser and Rodgers 2005, pp. 19-20.
- 73 *Ibid.*, p. 21.
- 74 For further information on young people and urbanization, see: UNFPA. 2007. *Growing Up Urban. Supplement to The State of World Population 2007*. New York: UNFPA.
- 75 Woodrow Wilson International Center for Scholars. 2003. *Youth Explosions in Developing World Cities: Approaches to Reducing Poverty and Conflict in an Urban Age*. Washington, D.C.: Woodrow Wilson International Center for Scholars.
- 76 For more information, see: UNFPA 2007.
- 77 UN-Habitat 2006a.
- 78 Engle, P. L. 2000. "Urban Women: Balancing Work and Childcare." 2020 *Focus* 03: Brief No. 08. Washington, D.C.: International Food Policy Research Institute. See also: UNESCO. n.d. "Overview: Growing Up in Cities."

- Geneva: A UNESCO-MOST Project. Website: [www.unesco.org/most/guic/guicaboutframes.htm](http://www.unesco.org/most/guic/guicaboutframes.htm), accessed 27 February 2007.
- 79 This section is based on: Guzman, J. M. 2006. "Urbanization and Ageing in Developing Countries." Draft paper prepared for this Report.
- 80 Calculations made using data from: United Nations. 2005b. *The Diversity of Changing Population Age Structures in the World* (UN/POP/PD/2005/1). United Nations Expert Group Meeting on Social and Economic Implications of Changing Population Age Structure, Mexico City, 31 August–2 September 2005. New York: Population Division, Department of Social and Economic Affairs, United Nations.
- 81 Cutler, S. J., and J. Hendricks. 2001. "Emerging Social Trends." Ch. 25 in: *Handbook of Aging and the Social Sciences*, Fifth Edition, edited by R. H. Binstock and L. K. George. 2001. San Diego, California: Academic Press.
- 82 UNCHS (Habitat). 1993. *Improving the Quality of Life of Elderly and Disabled People in Human Settlements: Volume I: A Resource Book of Policy and Programmes from around the World* (H/284/93E). Nairobi: UNCHS (Habitat).
- 83 In the four big cities study, it has been stated that: "Developing programs that identify vulnerable older people without violating their civil liberties is a crucial challenge . . ." — Rodwin, V. G., M. K. Gusmano, and R. N. Butler. 2006. "Growing Older in World Cities: Implications for Health and Long-Term Care Policy," p. 4. Ch. 1 in: *Growing Older in World Cities: New York, London, Paris, and Tokyo*, edited by V. G. Rodwin and M. K. Gusmano. 2006. Nashville, Tennessee: Vanderbilt University Press.
- 84 Kessides, C. 2005. "Contributions of Urban Development to Economic Growth and Poverty Reduction in Sub-Saharan Africa." Draft. Washington, D.C.: The World Bank.
- 85 UN-Habitat. 2006b. *Enabling Shelter Strategies: Review of Experience from Two Decades of Implementation*. Nairobi, Kenya: UN-Habitat.
- 86 Carolini, G. 2006. "Community Organizations of the Urban Poor: Realizing the MDGs and Planning for Urban Population Growth." Draft paper prepared for this Report.
- 87 d'Cruz, C., and D. Satterthwaite. 2005. "Building Homes, Changing Official Approaches: The Work of Urban Poor Organizations and their Federations and their Contributions to Meeting the Millennium Development Goals in Urban Areas," p. 1. IIED Poverty Reduction in Urban Areas Series. Working Paper. No. 16. London: International Institute for Environment and Development.
- 88 Baumann, T., J. Bolnick, and D. Mitlin. 2005. "The Age of Cities and Organizations of the Urban Poor: The Work of the South African Homeless People's Federation and the People's Dialogue on Land and Shelter," pp. i-ii. IIED Working Paper 2 on Poverty Reduction in Urban Areas. London: International Institute for Environment and Development.
- 89 Warah, R. 2002. "Afghan Women's Struggle Behind the Veil." *Habitat Debate* 8(4): 8-9.
- 90 Racelis, M. 2005. "Recasting Urban Power Relations." *In Focus* 7: 16-17. New York: International Poverty Centre, UNDP.
- 91 UNDP 2006b, p. 63.
- 92 Cities Alliance. 2006. *Annual Report 2006*, p. 11. Washington, D. C.: Cities Alliance.
- 93 UN-Habitat. 2006c. *Our Future: Sustainable Cities: Turning Ideas into Action*. (HSP/WUF/3/2), p. 27. Background Paper. World Urban Forum III, Vancouver, Canada, 19–23 June 2006. Nairobi: UN-Habitat.
- 94 Patel, S., and D. Mitlin. 2002. "Sharing Experiences and Changing Lives." *Community Development Journal* 37(2): 125-136. Cited in: Carolini 2006, p. 11.
- 95 See: Shack/Slum Dwellers International. n.d. "International Advocacy." Cape Town, South Africa: Shack/Slum Dwellers International. Website: <http://www.sdinet.org/rituals/ritual9.htm>, accessed 7 February 2007; and the Huairou Commission. n.d. "Grassroots Women on the Move: Acting Locally, Speaking Globally." Brooklyn, New York: Huairou Commission. Website: [www.huairou.org/index.html](http://www.huairou.org/index.html), accessed on 7 February 2007.
- 96 UN Millennium Project. 2005b. *A Home in the City*. Task Force on Improving the Lives of Slum Dwellers. London and Sterling, Virginia: Earthscan.
- 97 *Ibid.*, p. 3.
- 98 See: The World Bank. n.d. "Poverty Reduction Strategies." Washington, D.C.: The World Bank. Website: <http://web.world-bank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPRS/O,,menuPK:384207-pagePK:149018-piPK:149093-theSitePK:384201,00.html>, accessed 8 February 2007.
- 99 UN-Habitat 2006b, pp. 36-37.

## CHAPTER 3

- 1 United Nations. 2006a. *Implementation of the Outcome of the United Nations Conference on Human Settlements (Habitat II) and Strengthening of the United Nations Human Settlements Programme (UN-Habitat): Report of the Secretary General* (A/61/262), para. 8. New York: United Nations.
- 2 This chapter draws heavily on: McGranahan, G., D. Mitlin, and D. Satterthwaite. 2006. "Land and Services for the Urban Poor in Urbanizing Countries." Draft paper prepared for this Report; Tacoli, C., G. McGranahan, and D. Satterthwaite. 2006. "Urbanization, Poverty and Inequity: Is Rural-urban Migration a Poverty Problem, or Part of the Solution?" Draft paper prepared for this Report; and Martine, G. 2006. "Poverty, Space and Urban Growth." Draft paper prepared for this Report.
- 3 "There is no economic development without urbanization. Attempts to curb urbanization may have an adverse effect on economic development." — Tannerfeldt, G., and P. Ljung. 2006. *More Urban, Less Poor: an Introduction to Urban Development and Management*, p. 29. London: Swedish International Development Cooperation Agency and Earthscan.
- 4 The World Bank. 2000. *Cities in Transition: World Bank Urban and Local Government Strategy*, pp. 36-37. Washington, D.C.: The World Bank.
- 5 UN-Habitat. 2006. *State of the World's Cities 2006/7: The Millennium Development Goals and Urban Sustainability*, p. 16. London: Earthscan.
- 6 In 1996, 51 per cent of developing countries had policies to lower migration to urban agglomerations; this proportion rose to 73 per cent in 2005. See: United Nations. 2006b. *World Population Policies 2005* (ST/ESA/SER.A/254). New York: Population Division, Department of Economic and Social Affairs, United Nations.
- 7 UN Millennium Project. 2005. *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals*, p. xix. Report to the UN Secretary-

General. London and Sterling, Virginia: Earthscan.

- 8 Carolini, G. 2006. "Community Organizations of the Urban Poor: Realizing the MDGs and Planning for Urban Population Growth," p. 1. Draft paper prepared for this Report.
- 9 It is worth noting that many of the grass-roots organizations have been formed by poor urban women and have evolved to provide the foundation for large urban social movements.
- 10 In several instances, this Report alludes to the anti-urban bias of policymakers. This may cause some confusion for those familiar with the "urban bias" concept used by some economists to try to explain why rural areas remained poor. The term "anti-urban bias" is used here as short-hand simply to refer to the opposition of planners and policymakers to the demographic growth of cities and the many ways in which they try to prevent or retard it. Hence, the two concepts are not related or direct opposites.
- 11 du Plessis, J. 2005. "The Growing Problem of Forced Evictions and the Crucial Importance of Community-based, Locally Appropriate Alternatives." *Environment and Urbanization* 17(1): 123-134.
- 12 See: Montgomery, M. R., et al., Panel on Urban Dynamics, National Research Council (eds.). 2003. *Cities Transformed: Demographic Change and Its Implications in the Developing World*, pp. 176-177. Washington, D.C.: National Academies Press; and Rodriguez and Martine 2006, pp. 10-11.
- 13 The World Bank 2000, p. 2.
- 14 This is the case, for instance, of Nepal. Only 17 per cent of the country's 28 million population lives in urban areas. However, the combined forces of poverty and political instability swell the numbers of rural to urban migrants, and present a dire situation in urban slums. Nepal has been urbanizing very rapidly, at an average annual rate of 6.65 per cent in the intercensal period 1991-2001. Most of the increase has come from migration, intensified by an 11-year conflict, especially to the southern Terai region and to the slums of Kathmandu. There is no official record of the numbers of internally displaced persons (IDPs) in the country, but estimates range from 200,000 to 500,000. (Sources: UNFPA-Nepal Country Office. December 2006. Personal com-

- munication; and spreadsheets received from the United Nations Population Division.)
- 15 “The most constructive way of looking at the productive inter-linkages among urban and rural areas may be as a virtuous circle, whereby access to (urban) markets and services for non-farm production stimulates agricultural productivity and rural incomes, which in turn generate demand and labour supply for more such goods and services. The circle provides multiple entry points, and opportunities should be seized where they appear.” — Kessides, C. 2006. *The Urban Transition in Sub-Saharan Africa: Implications for Economic Growth and Poverty Reduction*, p. xvii. Africa Region Working Paper Series. No. 97. Washington, D. C.: Cities Alliance.
- 16 Angel, S., S. C. Sheppard, and D. L. Civco. 2005. *The Dynamics of Global Urban Expansion*, p. 91. Washington, D.C.: Transport and Urban Development Department, the World Bank.
- 17 Hardoy, J. E., D. Mitlin, and D. Satterthwaite. 1992. *Environmental Problems in Third World Cities*, p. 34. London: Earthscan Publications.
- 18 United Nations. 1995. *Population and Development, vol. 1: Programme of Action adopted at the International Conference on Population and Development: Cairo: 5-13 September 1994*, Section 9.1. New York: Department of Economic and Social Information and Policy Analysis, United Nations.
- 19 Thus, the point has been made that Target 11 of the MDGs—to improve the lives of at least 100 million slum dwellers by 2020—has generally been perceived as relatively easy to achieve, unlike some of the other MDG targets. This optimism, in addition to an uncharacteristically low target, apparently “. . . reflects an increasing acknowledgement and documentation of the successful improvements made through participatory and locally-led projects in slums”. — Carolini 2006, p. 1.
- 20 Tannerfeldt and Ljung 2006, p. 97.
- 21 In developing countries, it is common for street vendors to sell individual cigarettes at a higher price than their unit price if sold by the pack. Poor people pay more per unit used of water, fuel and other necessities because they buy only small quantities. Similarly, fitting the size of plots to the buying power of the poor usually results in higher prices per square metre. See: Smolka, M., and A. Larangeira. 2006. “Informality and Poverty in Latin American Urban Policy.” Draft paper prepared for this Report.
- 22 United Nations. 26 October 2006. “Habitat Chief Tells Second Committee of Looming Need for Pro-poor Mortgage Financing as Poverty Threatens Living Standards in World’s Cities” (GA/EF/3160), pp. 3-4. Press release. New York: United Nations.
- 23 “In many countries, the planning horizons of politicians are too short to engage in longer-term planning and preparation for orderly urban expansion.”— Angel, Sheppard, and Civco 2005, p. 101.
- 24 It is often wrongly assumed that most of the urban poor and those in illegal settlements are rural migrants, and thus they are denied the right to vote.
- 25 For a discussion of how such processes have operated in Brasilia, see, for instance: Acioly, Jr., C. C. 1994. “Incremental Land Development in Brasilia: Can the Urban Poor Escape from Suburbanization?” *Third World Planning Review* 16(3): 243-261; and Aubertin, C. 1992. “Le droit au logement: enjeu démocratique ou instrument du clientélisme: L’exemple de Brasilia: District federal.” *Cahiers des Sciences Humaines* 28(3): 461-479.
- 26 In this sense, an exceptional effort to regulate and sanitize land markets is currently going on in Spain, where land records going back seven years are being pored over and a number of powerful people are being indicted for alleged improprieties and irregularities in land transactions. (See: “Dos nuevos arrestados en la Operación Malaya.” 6 February 2007. *El País*. Website: [www.elpais.com/articulo/espana/nuevos/arrestados/Operacion/Malaya/elpepuesp/20070206elpepunac\\_7/Tes](http://www.elpais.com/articulo/espana/nuevos/arrestados/Operacion/Malaya/elpepuesp/20070206elpepunac_7/Tes), accessed 6 February 2007.) It coincides with a civil movement aimed at promoting affordable housing for all. This type of initiative would have to be implemented on a wide scale in developing countries as part of a strategy to regulate land markets.
- 27 United Nations 2006a, p. 5.
- 28 Angel, Sheppard, and Civco 2005.
- 29 *Ibid.*, p. 102.
- CHAPTER 4**
- 1 Angel, S., S. C. Sheppard, and D. L. Civco. 2005. *The Dynamics of Global Urban Expansion*, p. 102. Washington, D.C.: Transport and Urban Development Department, the World Bank.
- 2 *Ibid.*, p. 1.
- 3 This figure refers to urban settlements, including their green areas and empty spaces, as measured by (adjusted) night-time lights. It was provided by the Global Rural-Urban Mapping Project, alpha version (GRUMP alpha), Center for International Earth Science Information Network (CIESIN), Columbia University; International Food Policy Research Institute; the World Bank; and Centro Internacional de Agricultura Tropical (CIAT). 2004. *Gridded Population of the World, version 3, with Urban Reallocation (GPW-UR)*. Palisades, New York: Socioeconomic Data and Applications Center (SEDAC), Columbia University. Website: <http://sedac.ciesin.columbia.edu/gpw>, last accessed 14 February 2007. It thus differs from the figures on urban density provided from a study by: Angel, S., S. C. Sheppard, and D. L. Civco (2005, p. 1.) which refer only to *the built-up areas* of cities having at least 100,000 people.
- 4 World Resources Institute. 1996. *World Resources 1996-97: A Guide to the Global Environment: The Urban Environment*, pp. 57-59. New York and Oxford: Oxford University Press.
- 5 Martine, G. 2006. “Population/-Development/Environment Trends in a Globalized Context: Challenges for the 21<sup>st</sup> Century.” *Genus* 61(3-4): 247-277.
- 6 The concept of “urban sprawl” has not been clearly and consensually defined. In practice, however, average urban densities are a good summary indicator of sprawl. All exercises come up with significant variations between scores of different cities, despite the differing measures and indicators of “sprawl” that are employed. (See: Lopez, R., and H. P. Hynes. 2003. “Sprawl in the 1990s: Measurement, Distribution, and Trends.” *Urban Affairs Review* 38(3): 325-355. Cited in: “Urban Sprawl and Sustainable Cities: A Review,” p. 5, by D. J. Hogan and R. Ojima. 2006. Draft paper prepared for this Report.
- 7 Angel, Sheppard, and Civco 2005, p. 102.
- 8 Angel, S. 2006. “Measuring Global Sprawl: The Spatial Structure of the Planet’s Urban Landscape,” p. 13. Unpublished paper.
- 9 Angel, Sheppard, and Civco 2005, pp. 1-2. This may actually be a low estimate of declining densities. In the United States, at least, a study of 282 metropolitan areas found that the growth of land area outpaced population growth two to one (Reported in: Hogan and Ojima 2006, p. 3.).
- 10 Angel, Sheppard, and Civco 2005, pp. 1-2.
- 11 Hogan and Ojima 2006, p. 6.
- 12 Arbury, J. n.d. “From Urban Sprawl to Compact City: An Analysis of Urban Growth Management in Auckland.” Master’s Thesis. Auckland, New Zealand: University of Auckland. Website: <http://portal.jarbury.net/thesis.pdf>, accessed 18 September 2006.
- 13 *Ibid.*, p. 21.
- 14 Monte Mor, R. L. 2006. “O que é o urbano no mundo contemporâneo,” p. 11. *Texto para Discussão*, UFMG/Cedeplar, Belo Horizonte. Website: [www.cedeplar.ufmg.br](http://www.cedeplar.ufmg.br), last accessed 18 December 2006. Cited in: Hogan and Ojima 2006, p. 16.
- 15 Richardson, H. W., and C.-H. C. Bae (eds.). 2004. *Urban Sprawl in Western Europe and the United States*. Aldershot, United Kingdom: Ashgate. Cited in: Hogan and Ojima 2006, p. 3.
- 16 Pumain, D. 2004. “Urban Sprawl: Is There a French Case?” Pp. 137-157 in: Richardson and Bae 2004.
- 17 Munoz, F. 2003. “Lock Living: Urban Sprawl in Mediterranean Cities.” *Cities* 20(6): 381-385. Cited in: Hogan and Ojima 2006, p. 8.
- 18 Roca, J., M. C. Burns, and J. M. Carreras. 2004. “Monitoring Urban Sprawl around Barcelona’s Metropolitan Area with the Aid of Satellite Imagery.” Paper prepared for the 20th ISPRS Congress, Istanbul, Commission 1, Turkey, 12-23 July 2004. Istanbul, Turkey: International Society for Photogrammetry and Remote Sensing; and Munoz 2003. Both cited in: Hogan and Ojima 2006, p. 8.
- 19 Rio de Janeiro’s “Cidade de Deus” (City of God), made famous by a movie of that name, was created when the residents of well-located favelas were removed to a new settlement on the outskirts of the city in order to permit the construction of high rise apartments for the wealthy in the original favela locations.
- 20 Hogan and Ojima 2006, p. 8.
- 21 This and the following section have greatly benefited from: Tacoli, C. 2006. “A Note on

- Sprawl and Peri-urbanization." Draft note prepared for this Report.
- 22 Allen, A. 2003. "Environmental Planning and Management of the Peri-urban Interface: Perspectives on an Emerging Field," p. 136. *Environment and Urbanization* 15(1): 135-148; Simon, D., D. McGregor, and K. Nsiiah-Gyabaah. 2004. "The Changing Urban-rural Interface of African Cities: Definitional Issues and an Application to Kumasi, Ghana," p. 235. *Environment and Urbanization* 16(2): 235-248; and Parkinson, J., and K. Tayler. 2003. "Decentralized Wastewater Management in Peri-urban Areas in Low-income Countries," p. 75. *Environment and Urbanization* 15(1): 75-90.
- 23 Deliberate strategies of letting land lie vacant while urban infrastructure approaches and increases its value "... may be more specific to developing countries, where zoning, tax structures and the lack of more profitable and secure investments increase the appeal of investment in land." — Hogan and Ojima 2006, pp. 6-7.
- 24 See: Scientific Committee on Problems of the Environment. n.d. "Environmental Change in Urban Areas: A SCOPE Project." Website: [www.scope-uk.ac.uk/projects/PUECHsumOct01.html](http://www.scope-uk.ac.uk/projects/PUECHsumOct01.html), last accessed 14 February 2007.
- 25 Tacoli, C. 1999. "Understanding the Opportunities and Constraints for Low-Income Groups in the Peri-Urban Interface: The Contribution of Livelihood Frameworks," p. 7. Draft for Discussion. London: Peri-urban Interface Project, Development Planning Unit, University College London.
- 26 Tacoli 2006.
- 27 Leaf, M. 2002. "A Tale of Two Villages: Globalization and Peri-urban Change in China and Vietnam." *Cities* 19(1): 23-31.
- 28 Webster, D. 2002. *On the Edge: Shaping the future of Peri-Urban East Asia*. Asia/Pacific Research Center Discussion Paper. Stanford, California: Asia/Pacific Research Center, Stanford University
- 29 Webster, D., et al. 2003. *Emerging Third Stage Peri-urbanization: Functional Specialization in the Hangzhou Peri-urban Region*. Stanford, California: Asia/Pacific Research Center, Stanford University.
- 30 Allen 2003, p. 137; Ducrot, R., et al. 2004. "Articulating Land and Water Dynamics with Urbanization: An Attempt to Model Natural Resources Management at the Urban Edge," p. 87. *Computers, Environment and Urban Systems* 28(1-2): 85-106; and Kombe, W. J. 2005. "Land Use Dynamics in Peri-urban Areas and Their Implications on the Urban Growth and Form: The Case of Dar es Salaam, Tanzania," p. 120. *Habitat International* 29(1): 113-135.
- 31 Allen, A., N. da Silva, and E. Corubolo. 1999. "Environmental Problems and Opportunities of the Peri-urban Interface and Their Impact upon the Poor," p. 1. Draft for Discussion. London: Peri-urban Interface Project, Development Planning Unit, University College London; and Simon, McGregor, and Nsiiah-Gyabaah 2004, pp. 238 and 242.
- 32 Rostam, K. 1997. "Industrial Expansion, Employment Changes and Urbanization in the Peri-urban Areas of Klang-Langkat Valley, Malaysia." *Asian Profile* 25(4): 303-315.
- 33 "Activities typically undertaken outside the urban boundaries include disposal of solid wastes in landfills and sewage in surface water, quarries for construction materials, timber for firewood and construction, etc." — Tacoli, C. 27 November 2006. Personal communication.
- 34 Parkinson and Tayler 2003, p. 75; and Kombe 2005, p. 114.
- 35 Tacoli 1999, p. 7.
- 36 See the "environmental transition" concept outlined by: McGranahan, G., et al. 2001. *The Citizens at Risk: From Urban Sanitation to Sustainable Cities*. London: Earthscan.
- 37 Songsore, J., and G. McGranahan. 1998. "The Political Economy of Household Environmental Management: Gender, Environment, and Epidemiology in the Greater Accra Metropolitan Area." *World Development* 26(3): 395-412.
- 38 Arbury n.d.
- 39 Ibid.
- 40 Hogan and Ojima 2006, p. 18.
- 41 United Nations. 2006. *Implementation of the Outcome of the United Nations Conference on Human Settlements (Habitat II) and Strengthening of the United Nations Human Settlements Programme (UN-Habitat): Report of the Secretary General (A/61/262)*, para. 26(d). New York: United Nations.
- 42 Angel, Sheppard, and Civco 2005, pp. 11-13.
- 43 Ibid., pp. 91 and 95.
- 44 Ibid., p. 101.
- 45 Ibid., p. 101. Such preparations would include: securing the public lands and public rights-of-way that are necessary to serve future urban growth; protecting sensitive lands from building, and investing in minimal infrastructure such as transport grids, water supply, sewerage and drainage networks to accommodate growth.
- 46 Hogan and Ojima 2006, p. 12; and International Human Dimensions Programme on Global Change. 2005. *SciencePlan: Urbanization and Global Environmental Change*. IHDP Report. No. 15. Bonn, Germany: International Human Dimensions Programme on Global Change.
- 47 Tacoli 2006.
- 48 Hogan and Ojima 2006, pp. 7 and 16.
- 49 See also: The World Bank. 2000. *Cities in Transition. World Bank Urban and Local Government Strategy*, p. 105. Washington, D.C.: The World Bank. This study suggests the use of the term "commutershed" to refer to a self-defined economic area that represents a particular local and subregional economy in the minds of its participants.

## CHAPTER 5

- Worldwatch Institute. 2007. "Preface," p. xxiv. *State of the World 2007: Our Urban Future*. New York and London: W. W. Norton and Company.
- This chapter is mostly based on: Sanchez Rodriguez, R. 2006. "Urban Growth and Sustainability: New Approaches." Draft paper prepared for this Report; de Sherbinin, A. 2007. "Linking Urban Growth and GEC." Note prepared for this Report; and Balk, D., and B. Anderson. 2007. "Urban Growth and Ecosystems: Recent Patterns and Future Implications." Draft paper prepared for this Report.
- For instance, a recently published report on cities by the Worldwatch Institute (2007. *State of the World 2007: Our Urban Future*. New York and London: W. W. Norton and Company) documents an impressive number of positive stories showing how people are dealing effectively with current social and environmental problems in cities.
- Examples of local or national problems that contribute to GEC include carbon-dioxide and pollutant emissions, land-cover change and habitat loss, invasive species, oceanic pollution and over fishing. All of them have significant ramifications when aggregated globally.
- McGranahan, G., et al. 2005. "Urban Systems." Ch. 27 in: *Ecosystems and Human Well-being: Current State and Trends: Findings of the Condition and Trends Working Group*, by the Millennium Ecosystem Assessment. 2005. Millennium Ecosystem Assessment Series. New York: Island Press.
- Wallace, S. January 2007. "Amazon: Forest to Farms." *National Geographic*.
- Wackernagel, M., and W. Rees. 1996. *Our Ecological Footprint: Reducing Human on Earth*. San Francisco, California: New Catalyst Books.
- See: McGranahan, et al. 2005.
- Tortajada, C., and E. Castelán. 2003. "Water Management for a Megacity: Mexico City Metropolitan Area." *Ambio* 32(2): 124-129; and Pocha, J. 5 September 2004. "China's Water Supply in Danger of Drying Up," p. A-16. *San Francisco Chronicle*.
- Rosegrant, M. W., and C. Ringler. 1998. "Impact on Food Security and Rural Development of Transferring Water out of Agriculture." *Water Policy* 1(6): 567-586.
- Vörösmarty, C. 2006. "Box D.2: Water Impoundment and Flow Fragmentation." Pp. 259-260 in: *Pilot 2006 Environmental Performance Index*, by the Yale Center for Environmental Law and Policy and the Center for International Earth Science Information Network, Columbia University. 2006. New Haven, Connecticut, and Palisades, New York: Yale Center for Environmental Law and Policy and the Center for International Earth Science Information Network, Columbia University.
- According to the United States Environmental Protection Agency. See: United States Environmental Protection Agency. n.d. "Heat Island Effect." Washington, D.C.: United States Environmental Protection Agency. Website: <http://yosemite.epa.gov/oar/globalwarming.nsf/content/ActionsLocalHeatIslandEffect.html>, accessed 29 January 2007.
- Ashmore, M. R. 2005. "Assessing the Future Global Impacts of Ozone on Vegetation." *Plant, Cell and Environment* 28(8): 949-964.

- 14 Lo, C. P., and D. A. Quattrochi. 2003. "Land-use and Land-cover Change, Urban Heat Island Phenomenon, and Health Implications: A Remote Sensing Approach." *Photogrammetric Engineering and Remote Sensing* 69(9): 1053-1063.
- 15 Intergovernmental Panel on Climate Change. 2007. *Climate Change 2007: The Physical Science Basis: Summary for Policy Makers*. Geneva: Intergovernmental Panel on Climate Change. Website: [www.ipcc.ch/SPM2feb07.pdf](http://www.ipcc.ch/SPM2feb07.pdf), accessed 6 February 2007.
- 16 UNEP. 2004. *UNEP 2003 Annual Report*. New York: UNEP.
- 17 Perlman, J., and M. O. Sheehan. 2007. "Fighting Poverty and Injustice in Cities," Ch. 9 in: *Worldwatch Institute 2007*; and de Sherbinin, A., A. Schiller, and A. Pulsipher. Forthcoming. "The Vulnerability of Global Cities to Climate Hazards." *Environment and Urbanization*.
- 18 Center for Research on the Epidemiology of Disasters. 2006. *EM-DAT: The OFDA/CRED International Disaster Database*. Brussels, Belgium: Center for Research on the Epidemiology of Disasters.
- 19 This section is based on: McGranahan, G., D. Balk, and B. Anderson. Forthcoming. "The Rising Risks of Climate Change: Urban Population Distribution and Characteristics in Low Elevation Coastal Zones." *Environment and Urbanization*; and McGranahan, et al. 2005.
- 20 McGranahan, Balk, and Anderson, Forthcoming.
- 21 Gugler, J. 1996. "Urbanization in Africa South of the Sahara: New Identities in Conflict." Ch. 7 in: *The Urban Transformation of the Developing World*, edited by J. Gugler. Oxford: Oxford University Press.
- 22 For example, the International Council of Local Environmental Initiatives (ICLEI) (Website: [www.iclei.org/](http://www.iclei.org/), last accessed 7 March 2007). Also, for an exploration of different scales of initiative and the role of city networks in relation to climate change, see: Bulkeley, H., and M. Betsill. 2003. *Cities and Climate Change: Urban Sustainability and Global Environmental Governance*. Routledge Studies in Physical Geography and Environment. London: Routledge.
- Trends, Future Projections, and Key Challenges for Sustainability," p. 78. *Technology in Society* 28 (1-2): 63-80.
- 2 For a comprehensive discussion of the concept of governance as applied to urban areas, see: Montgomery, M. R., et al., Panel on Urban Dynamics, National Research Council (eds.). 2003. *Cities Transformed: Demographic Change and Its Implications in the Developing World*, pp. 355-409. Washington, D.C.: National Academies Press; and the World Bank. 2000. *Cities in Transition: World Bank Urban and Local Government Strategy*. Washington, D.C.: The World Bank.
- 3 The World Bank 2000, p. 35.
- 4 Montgomery, M. R., et al., Panel on Urban Dynamics, National Research Council (eds.) 2003.
- 5 In view of further climate change—as underlined by the recent report of the Intergovernmental Panel on Climate Change—including probable future rises in mean sea levels, low-elevation coastal areas, which are home to 360 million urbanites, merit specific attention. See: Intergovernmental Panel on Climate Change. 2007. *Climate Change 2007: The Physical Science Basis: Summary for Policy Makers*. Geneva: Intergovernmental Panel on Climate Change. Website: [www.ipcc.ch/SPM2feb07.pdf](http://www.ipcc.ch/SPM2feb07.pdf), accessed 14 February 2007.
- 6 UN Millennium Project. 2006. *Public Choices, Private Decisions: Sexual and Reproductive Health and the Millennium Development Goals*, p. 72. New York: UNDP.
- 7 UNESCO. 2001. *Women and Urban Crisis: Gender Sensitive Strategies for Managing Critical Urban Environments in the South and East*, p. 14. Paris: MOST-UNESCO.
- 8 An authoritative World Bank study found much higher than expected inequalities on such measures as infant and child mortality, maternal mortality, malnutrition and fertility. See: Gwatkin, D., et al. 2000. *Socio-economic Differences in Health, Nutrition and Population: 45 Countries*. Washington, D.C.: Health, Nutrition and Population Department, the World Bank.
- 9 Ibid.; and Gwatkin, D. R., A. Wagstaff, and A. S. Yazbeck. 2005. *Reaching the Poor with Health, Nutrition and Population Services: What Works, What Doesn't, and Why*. Washington, D.C.: The World Bank.
- 10 These results have been described as indicating an "absolute system failure" in reproductive health care for poor and vulnerable people. See: Campbell-White, A., T. Merrick, and A. Yazbeck. 2007. "Reproductive Health: The Missing MDG: Poverty, Health and Development in a Changing World." Preliminary draft. Washington, D.C.: The World Bank.
- 11 UN Millennium Project 2006, p. 61.
- 12 This section is partly based on: Torres, H. G. 2006. "Socioeconomic and Demographic Information for Urban Social Policies." Draft paper prepared for this Report.
- 13 The World Bank. 2003. *World Development Report 2004: Making Services Work for Poor People*, p. 22. Washington, D.C., and Oxford: The World Bank and Oxford University Press.
- 14 Lyons, M., C. Smuts, and A. Stephens. 2001. "Participation, Empowerment and Sustainability: (How) Do the Links Work?" *Urban Studies* 38(8): 1233-1251; and Mitlin, D., and J. Thompson. 1995. "Participatory Approaches in Urban Areas: Strengthening Civil Society or Reinforcing the Status Quo?" *Environment and Urbanization* 7(1): 231-250.
- 15 UNCHS (Habitat). 2000. *Women and Urban Governance*, p. 35. Policy Dialogue Series, No. 1. Nairobi: UNCHS (Habitat).
- 16 Mitlin and Thompson 1995.
- 17 Court, J., and L. Cotterrell. 2006. *What Political and Institutional Context Issues Matter for Bridging Research and Policy: A Literature Review and Discussion of Data Collection Approaches*. ODI Working Paper. No. 269. London: Overseas Development Institute.
- 18 Crewe, E., and J. Young. 2002. *Bridging Research and Policy: Context, Evidence and Links*. ODI Working Paper. No. 173. London: Overseas Development Institute.
- 1 Cohen, B. 2006. "Urbanization in Developing Countries: Current

## CHAPTER 6

# Notes for Boxes

## CHAPTER 1

### BOX 2

- 1 Excerpts from: Ness, G. D. 2006. "Organizing for Urbanization in the Second Wave." Draft paper prepared for this Report.

### BOX 3

- 1 Based on: Cavric, B., et al. 2003. "Sustainable Urban Development in Gaborone, Botswana." *Report of the Designing, Implementing and Measuring Sustainable Urban Development (DIMSUD) Project of the Swiss Federal Institute of Technology*. Zurich: Swiss Federal Institute of Technology.

## CHAPTER 2

### BOX 4

- 1 UN-Habitat. 2006. *State of the World's Cities 2006/7: The Millennium Development Goals and Urban Sustainability*, p. 19. London: Earthscan.

### BOX 5

- 1 Gharzeddine, O. 2007. UNFPA mission report.

### BOX 6

- 1 Excerpted from: Seager, A. 10 November 2006. "Africa's Largest Slum: Where Youngsters Play among Bags Full of Raw Sewage." *The Guardian*.

### BOX 8

- 1 See the website of the Huairou Foundation: [www.huairou.org/index.html](http://www.huairou.org/index.html), last accessed 7 March 2007.
- 2 United Nations. 2005. *Women 2000 and Beyond: Gender Equality and Empowerment of Women in ICT*, p. 7. New York: Division for the Advancement of Women, United Nations.
- 3 See: Mitlin, D. 2001. "Civil Society and Urban Poverty: Examining Complexity." *Environment and Urbanization* 13(2): 151-173.
- 4 See the website of the Self Employed Women's Association: <http://sewa.org/>, accessed 15 February 2007.
- 5 McGranahan, G. 12 January 2007. Personal communication.

### BOX 11

- 1 **Source:** Guerra, E. 2002. "Citizenship Knows No Age: Children's Participation in the Governance and Municipal Budget of Barra Mansa, Brazil." *Environment and Urbanization* 14(2): 71-84.

### BOX 12

- 1 Based on: Ness, G. D. 2006. "Organizing for Urbanization in the Second Wave." Draft paper prepared for this Report.

## CHAPTER 3

### BOX 13

- 1 Based on: Hakkert, R. 2007. "Three Notes on Central Issues in Poverty and Urbanization." Draft paper prepared for this Report.

### BOX 14

- 1 Angel, S., S. C. Sheppard, and D. L. Civco. 2005. *The Dynamics of Global Urban Expansion*, p. 12. Washington, D.C.: Transport and Urban Development Department, the World Bank.
- 2 Rodriguez, J., and G. Martine. 2006. "Urbanization in Latin America: Experiences and Lessons Learned," p. 16. Draft paper prepared for this Report.
- 3 Skeldon, R. 2005. "Migration and Poverty Reduction: Linkages between Migration and Poverty: The Millennium Development Goals and Population Mobility," p. 57. Ch. 3 in: *International Migration and the Millennium Development Goals: Selected Papers of the UNFPA Expert Group Meeting: Marrakech, Morocco, 11-12 May 2005*, by UNFPA. 2005. New York: UNFPA.

### BOX 15

- 1 Hakkert, R. 2007. "Three Notes on Central Issues in Poverty and Urbanization." Draft paper prepared for this Report.

### BOX 16

- 1 Based on: Smolka, M., and A. Larangeira. 2006. "Informality and Poverty in Latin American Urban Policy." Draft paper prepared for this Report.

### BOX 17

- 1 Text summarized and adapted from: Angel, S. 2006. "Preparing for Urban Expansion in

Intermediate Cities in Ecuador: A World Bank Project Focusing on Access to Land for the Urban Poor." Draft paper prepared for this Report.

## CHAPTER 4

### BOX 18

- 1 **Source:** Yu Zhu, Xinhua Qi, Huaiyou Shao, and Kaijing He, Centre for Population and Development Research, Fujian Normal University. 11 January 2007. Personal communication.

### BOX 19

- 1 Information for much of this box comes from: International Development Research Centre. n.d. "Growing Better Cities." Slide Presentation. Ottawa, Canada: International Development Centre. Website: [www.idrc.ca/in\\_focus\\_cities/ev-95429-201-1-DO\\_TOPIC.html](http://www.idrc.ca/in_focus_cities/ev-95429-201-1-DO_TOPIC.html), accessed 6 February 2007.
- 2 International Development Research Centre. 2006. *Shaping Livable Cities: Stories of Progress Around the World*, p. 27. Ottawa, Canada: International Development Centre.

### BOX 20

- 1 Based on an article by: Etienne, J., Department of Infrastructure and Urban Development, French Development Agency. 2006. "Access to Water and Sanitation Services in the Districts of Ouagadougou (Burkina Faso)." *Villes en développement*. No. 72-73: 9-10; and on project monitoring by J. Etienne.

### BOX 21

- 1 This box is based mostly on: Roberts, S. 26 November 2006. "Bloomberg Administration is Developing Land Use Plan to Accommodate Future Populations," p. 39. *The New York Times*.

## CHAPTER 5

### BOX 23

- 1 This box is based on information obtained from: United States Census Bureau, United States Department of Commerce. 2 September 2005. "Census Bureau Estimates Nearly 10 Million Residents Along Gulf Coast Hit by Hurricane Katrina." Press release. Washington, D.C.: United States

Census Bureau, United States Department of Commerce. Website: [http://www.census.gov/Press-Release/www/releases/archives/hurricanes\\_tropical\\_storms/005673.html](http://www.census.gov/Press-Release/www/releases/archives/hurricanes_tropical_storms/005673.html), accessed 7 February 2007; and Columbia University website: [www.columbia.edu/~ba218/katrina.zip](http://www.columbia.edu/~ba218/katrina.zip), last accessed 8 March 2007.

## CHAPTER 6

### BOX 24

- 1 UN Millennium Project. 2006. *Public Choices, Private Decisions: Sexual and Reproductive Health and the Millennium Development Goals*, pp. 36-40. New York: UNDP.
- 2 Hakkert, R. 2007. "Three Notes on Central Issues in Poverty and Urbanization." Note prepared for this Report.
- 3 UN Millennium Project 2006, pp. 36-40.

### BOX 25

- 1 Kretzmann, J. P., and J. L. McKnight. 1997. *Building Communities from the Inside Out: A Path Toward Finding and Mobilizing a Community's Assets*. Chicago, Illinois: ACTA Publications.
- 2 Asian Coalition for Housing Rights. 2001. "Building an Urban Poor People's Movement in Phnom Penh, Cambodia." *Environment and Urbanization* 13(2): 61-72. Cited in Carolini, G. 2006. "Community Organizations of the Urban Poor: Realizing the MDGs and Planning for Urban Population Growth," p. 9. Paper prepared for this Report.
- 3 Weru, J. 2004. "Community Federations and City Upgrading: The Work of Pamoja Trust and Muungano in Kenya." *Environment and Urbanization* 16(1): 47-62. Cited in: Carolini 2006, p. 9.
- 4 Smaoun, S. 2002. "Women's Safety Audits." *Habitat Debate* 8(4): p. 13.

### BOX 27

- 1 Peñalosa, E. 1 November 2006. Personal communication.

## Monitoring ICPD Goals - Selected Indicators

	Indicators of Mortality			Indicators of Education				Reproductive Health Indicators			
	Infant mortality Total per 1000 live births	Life expectancy M/F	Maternal mortality ratio	Primary enrolment (gross) M/F	Proportion reaching grade 5 M/F	Secondary enrolment (gross) M/F	% Illiterate (>15 years) M/F	Births per 1,000 women aged 15-19	Contraceptive Prevalence Any method	Modern methods	HIV prevalence rate (%) (15-49) M/F
<b>World Total</b>	<b>53</b>	<b>64.2 / 68.6</b>					<b>13 / 23</b>	<b>53</b>	<b>61</b>	<b>54</b>	
<b>More developed regions (*)</b>	<b>7</b>	<b>72.5 / 79.8</b>						<b>25</b>	<b>69</b>	<b>57</b>	
<b>Less developed regions (+)</b>	<b>58</b>	<b>62.7 / 66.2</b>						<b>57</b>	<b>59</b>	<b>53</b>	
<b>Least developed countries (‡)</b>	<b>92</b>	<b>51.4 / 53.2</b>						<b>112</b>			
<b>AFRICA (1)</b>	<b>89</b>	<b>49.1 / 50.4</b>						<b>103</b>	<b>27</b>	<b>21</b>	
<b>EASTERN AFRICA</b>	<b>87</b>	<b>46.8 / 47.4</b>						<b>103</b>	<b>23</b>	<b>18</b>	
Burundi	100	44.3 / 46.3	1,000	91 / 78	66 / 68	15 / 11	33 / 48	50	16	10	2.6 / 3.9
Eritrea	58	53.8 / 57.5	630	71 / 57	83 / 74	40 / 23		91	8	5	1.9 / 2.8
Ethiopia	92	47.5 / 49.3	850	101 / 86		38 / 24		82	8	6	
Kenya	64	50.5 / 48.7	1,000	116 / 112	81 / 85	50 / 48	22 / 30	94	39	32	4.2 / 8.0
Madagascar	72	54.9 / 57.3	550	141 / 136	43 / 43	14 / 14	23 / 35	115	27	18	0.7 / 0.3
Malawi	103	41.2 / 40.3	1,800	121 / 124	40 / 37	31 / 25	25 / 46	150	31	26	11.5 / 16.5
Mauritius (2)	14	69.6 / 76.3	24	102 / 102	98 / 100	89 / 88	12 / 19	31	76	41	0.9 / 0.2
Mozambique	92	41.5 / 41.9	1,000	114 / 96	66 / 58	16 / 11		99	17	12	13.0 / 19.2
Rwanda	113	43.3 / 46.2	1,400	119 / 121	43 / 49	15 / 13	29 / 40	44	13	4	2.7 / 3.4
Somalia	114	47.3 / 49.8	1,100					66			0.7 / 1.0
Uganda	77	50.7 / 52.3	880	118 / 117	63 / 64	18 / 14	23 / 42	203	23	18	5.6 / 7.7
United Republic of Tanzania	104	46.1 / 46.6	1,500	108 / 104	76 / 76	6 / 5	22 / 38	98	26	20	5.8 / 7.1
Zambia	89	39.3 / 38.2	750	114 / 108	83 / 78	31 / 25	24 / 40	122	34	23	14.0 / 20.0
Zimbabwe	60	37.9 / 36.0	1,100	97 / 95	68 / 71	38 / 35		84	54	50	15.6 / 25.0
<b>MIDDLE AFRICA (3)</b>	<b>110</b>	<b>43.4 / 45.4</b>						<b>179</b>	<b>24</b>	<b>6</b>	
Angola	131	40.3 / 43.2	1,700	69 / 59		19 / 15	17 / 46	138	6	5	3.0 / 4.4
Cameroon	91	45.6 / 46.5	730	126 / 107	64 / 63	49 / 39	23 / 40	102	26	13	4.1 / 6.8
Central African Republic	94	38.8 / 39.8	1,100	67 / 44			35 / 67	115	28	7	8.7 / 12.7
Chad	112	43.1 / 45.2	1,100	92 / 62	34 / 32	23 / 8	59 / 87	189	2	1	3.1 / 3.9
Congo, Democratic Republic of the (4)	113	43.5 / 45.6	990	69 / 54		28 / 16	19 / 46	222	31	4	2.6 / 3.9
Congo, Republic of	69	52.0 / 54.6	510	91 / 84	65 / 67	42 / 35		143			4.2 / 6.3
Gabon	52	53.0 / 53.6	420	130 / 129	68 / 71	49 / 42		95	33	12	6.3 / 9.4
<b>NORTHERN AFRICA (5)</b>	<b>39</b>	<b>66.4 / 70.2</b>						<b>29</b>	<b>51</b>	<b>45</b>	
Algeria	31	70.8 / 73.6	140	116 / 107	94 / 97	80 / 86	20 / 40	7	64	50	0.1 / <0.1
Egypt	31	68.8 / 73.3	84	103 / 98	98 / 99	90 / 84	17 / 41	38	60	57	<0.1 / <0.1
Libyan Arab Jamahiriya	17	72.4 / 77.1	97	108 / 106		101 / 107		7	45	26	
Morocco	32	68.6 / 73.1	220	111 / 99	81 / 77	54 / 46	34 / 60	23	63	55	0.2 / <0.1
Sudan	66	55.6 / 58.2	590	65 / 56	78 / 79	35 / 33	29 / 48	47	10	7	1.4 / 1.8
Tunisia	19	72.0 / 76.2	120	112 / 108	96 / 97	74 / 80	17 / 35	7	63	53	
<b>SOUTHERN AFRICA</b>	<b>41</b>	<b>43.3 / 43.0</b>						<b>59</b>	<b>53</b>	<b>52</b>	
Botswana	44	34.4 / 32.4	100	105 / 104	89 / 92	73 / 77	20 / 18	71	40	39	24.0 / 31.9
Lesotho	60	33.8 / 34.2	550	132 / 131	58 / 69	34 / 43	26 / 10	34	37	35	19.5 / 27.0
Namibia	37	46.3 / 45.1	300	98 / 100	84 / 85	60 / 61	13 / 17	46	44	43	15.4 / 23.8
South Africa	39	44.2 / 44.2	230	106 / 102	82 / 83	90 / 97	16 / 19	61	56	55	15.0 / 22.5
Swaziland	65	30.5 / 29.0	370	111 / 104	74 / 80	46 / 44	19 / 22	33	28	26	26.7 / 40.0
<b>WESTERN AFRICA (6)</b>	<b>109</b>	<b>46.7 / 47.5</b>						<b>129</b>	<b>13</b>	<b>8</b>	
Benin	98	54.8 / 56.3	850	107 / 85	53 / 50	41 / 23	52 / 77	120	19	7	1.4 / 2.2
Burkina Faso	116	48.2 / 49.8	1,000	64 / 51	75 / 76	16 / 12	71 / 85	151	14	9	1.6 / 2.4
Côte d'Ivoire	115	45.5 / 46.9	690	80 / 63	88 / 87	32 / 18	39 / 61	107	15	7	5.6 / 8.5
Gambia	69	56.2 / 58.8	540	79 / 84		51 / 42		109	10	9	2.0 / 2.9

## Monitoring ICPD Goals - Selected Indicators

	Indicators of Mortality			Indicators of Education				Reproductive Health Indicators			
	Infant mortality Total per 1000 live births	Life expectancy M/F	Maternal mortality ratio	Primary enrolment (gross) M/F	Proportion reaching grade 5 M/F	Secondary enrolment (gross) M/F	% Illiterate (>15 years) M/F	Births per 1,000 women aged 15-19	Contraceptive Prevalence Any method	Modern methods	HIV prevalence rate (%) (15-49) M/F
Ghana	56	57.4 / 58.3	540	94 / 93	62 / 65	48 / 42	34 / 50	55	25	19	1.6 / 3.0
Guinea	97	54.2 / 54.5	740	88 / 74	78 / 73	39 / 21	57 / 82	176	6	4	0.9 / 2.1
Guinea-Bissau	112	44.1 / 46.7	1,100	84 / 56		23 / 13		188	8	4	3.1 / 4.5
Liberia	133	41.8 / 43.2	760	115 / 83		37 / 27		219	6	6	
Mali	127	48.4 / 49.7	1,200	74 / 59	78 / 70	28 / 17	73 / 88	189	8	6	1.4 / 2.1
Mauritania	89	52.7 / 55.9	1,000	93 / 94	51 / 55	22 / 19	40 / 57	92	8	5	0.5 / 0.8
Niger	146	45.3 / 45.3	1,600	54 / 39	66 / 64	10 / 7	57 / 85	244	14	4	0.9 / 1.4
Nigeria	109	43.9 / 44.1	800	111 / 95	71 / 75	37 / 31		126	13	8	3.0 / 4.7
Senegal	78	55.6 / 58.2	690	89 / 86	79 / 77	30 / 23	49 / 71	75	11	8	0.7 / 1.1
Sierra Leone	160	40.4 / 43.1	2,000	171 / 139		34 / 26	53 / 76	160	4	4	1.3 / 1.8
Togo	88	53.7 / 57.2	570	108 / 92	79 / 70	54 / 27	31 / 62	89	26	9	2.6 / 3.9
<b>ASIA</b>	<b>48</b>	<b>66.7 / 70.7</b>						<b>40</b>	<b>63</b>	<b>58</b>	
<b>EASTERN ASIA (7)</b>	<b>29</b>	<b>71.6 / 76.0</b>						<b>5</b>	<b>82</b>	<b>81</b>	
China	31	70.7 / 74.4	56	118 / 117		73 / 73	5 / 13	5	84	83	0.1 / <0.1
Democratic People's Republic of Korea	42	61.4 / 67.3	67					2	62	53	
Hong Kong SAR, China (8)	4	79.2 / 85.1		108 / 101	99 / 100	89 / 85		5	86	80	
Japan	3	79.1 / 86.3	10 <sup>9</sup>	100 / 101		101 / 102		4	56	51	<0.1 / <0.1
Mongolia	52	63.7 / 67.7	110	117 / 119		88 / 100	2 / 2	52	67	54	0.1 / <0.1
Republic of Korea	3	74.4 / 81.8	20	105 / 104	98 / 98	93 / 93		4	81	67	<0.1 / 0.1
<b>SOUTH-EASTERN ASIA</b>	<b>34</b>	<b>66.6 / 71.1</b>						<b>38</b>	<b>60</b>	<b>51</b>	
Cambodia	88	54.2 / 61.1	450	139 / 129	62 / 65	35 / 24	15 / 36	42	24	19	1.8 / 1.5
Indonesia	35	66.7 / 70.2	230	118 / 116	88 / 90	64 / 64	6 / 13	52	60	57	0.2 / <0.1
Lao People's Democratic Republic	80	55.1 / 57.6	650	123 / 108	64 / 62	53 / 40	23 / 39	85	32	29	0.2 / <0.1
Malaysia	9	71.8 / 76.4	41	94 / 93	99 / 98	71 / 81	8 / 15	18	55	30	0.7 / 0.2
Myanmar	67	58.7 / 64.6	360	99 / 101	68 / 72	41 / 40	6 / 14	16	37	33	1.7 / 0.8
Philippines	24	69.3 / 73.7	200	113 / 111	71 / 80	82 / 90	7 / 7	33	49	33	<0.1 / <0.1
Singapore	3	77.5 / 81.2	30				3 / 11	5	62	53	0.4 / 0.2
Thailand	17	68.2 / 74.8	44	100 / 95		72 / 74	5 / 9	46	72	70	1.7 / 1.1
Timor-Leste, Democratic Republic of	82	56.4 / 58.6	660	158 / 147		51 / 50		168	10	9	
Viet Nam	26	69.8 / 73.7	130	98 / 91	87 / 86	77 / 75	6 / 13	17	79	57	0.7 / 0.3
<b>SOUTH CENTRAL ASIA</b>	<b>62</b>	<b>63.0 / 66.1</b>						<b>65</b>	<b>48</b>	<b>42</b>	
Afghanistan	143	47.2 / 47.7	1,900	108 / 64		24 / 8	57 / 87	113	5	4	<0.1 / <0.1
Bangladesh	50	63.7 / 65.6	380	96 / 101	33 / 37	44 / 47		108	58	47	<0.1 / <0.1
Bhutan	48	63.5 / 66.0	420		89 / 93			27	19	19	0.1 / <0.1
India	60	63.0 / 66.5	540	120 / 112	81 / 76	59 / 47	27 / 52	63	48	43	1.3 / 0.5
Iran (Islamic Republic of)	28	70.0 / 73.3	76	100 / 122	88 / 87	83 / 78	17 / 30	17	73	56	0.2 / 0.1
Nepal	56	62.8 / 63.9	740	129 / 123	75 / 83	46 / 40	37 / 65	102	39	35	0.8 / 0.2
Pakistan	71	64.4 / 64.7	500	99 / 75	68 / 72	31 / 23	37 / 64	68	28	20	0.2 / <0.1
Sri Lanka	15	72.4 / 77.7	92	102 / 101		82 / 83	8 / 11	17	70	50	0.1 / <0.1
<b>WESTERN ASIA</b>	<b>42</b>	<b>67.0 / 71.3</b>						<b>40</b>	<b>47</b>	<b>29</b>	
Iraq	83	59.2 / 62.3	250	108 / 89	87 / 73	54 / 35	16 / 36	37	14	10	
Israel	5	78.3 / 82.5	17	110 / 111	100 / 100	93 / 93	2 / 4	14	68	52	
Jordan	20	70.9 / 74.1	41	98 / 99	99 / 99	87 / 88	5 / 15	25	56	41	
Kuwait	10	75.7 / 80.1	5	99 / 97		92 / 98	6 / 9	22	50	41	
Lebanon	19	70.8 / 75.2	150	108 / 105	91 / 96	85 / 93		25	61	37	0.2 / 0.1
Occupied Palestinian Territory	18	71.7 / 74.9	100	89 / 88		96 / 102	3 / 12	77	51	37	

## Monitoring ICPD Goals - Selected Indicators

	Indicators of Mortality			Indicators of Education				Reproductive Health Indicators			
	Infant mortality Total per 1000 live births	Life expectancy M/F	Maternal mortality ratio	Primary enrolment (gross) M/F	Proportion reaching grade 5 M/F	Secondary enrolment (gross) M/F	% Illiterate (>15 years) M/F	Births per 1,000 women aged 15-19	Contraceptive Prevalence Any method	Modern methods	HIV prevalence rate (%) (15-49) M/F
Oman	14	73.6 / 76.7	87	84 / 85	98 / 98	89 / 85	13 / 26	41	24	18	
Saudi Arabia	19	71.0 / 75.0	23	91 / 91	100 / 94	89 / 86	13 / 31	30	32	29	
Syrian Arab Republic	16	72.4 / 76.1	160	127 / 121	93 / 92	70 / 65	14 / 26	30	40	28	
Turkey (10)	37	67.3 / 72.0	70	96 / 90	95 / 94	90 / 68	5 / 20	36	64	38	
United Arab Emirates	8	77.3 / 82.0	54	85 / 82	96 / 97	62 / 66		18	28	24	
Yemen	60	61.1 / 63.9	570	102 / 72	78 / 67	64 / 31		86	21	10	
<b>ARAB STATES (11)</b>	<b>50</b>	<b>66.3 / 69.8</b>	<b>252</b>	<b>101 / 91</b>	<b>90 / 87</b>	<b>71 / 64</b>	<b>20 / 41</b>	<b>30</b>	<b>43</b>	<b>36</b>	<b>0.4 / 0.4</b>
<b>EUROPE</b>	<b>9</b>	<b>70.1 / 78.4</b>						<b>17</b>	<b>69</b>	<b>53</b>	
<b>EASTERN EUROPE</b>	<b>14</b>	<b>62.6 / 73.8</b>						<b>26</b>	<b>63</b>	<b>41</b>	
Bulgaria	12	69.7 / 76.3	32	106 / 104		104 / 100	1 / 2	41	42	26	
Czech Republic	5	73.0 / 79.3	9	103 / 101	98 / 99	95 / 96		11	72	63	<0.1 / <0.1
Hungary	8	69.7 / 77.7	16	99 / 97		97 / 96		20	77	68	0.1 / <0.1
Poland	8	71.1 / 79.0	13	99 / 99		96 / 97		14	49	19	0.2 / 0.1
Romania	16	68.6 / 75.7	49	107 / 106		85 / 86	2 / 4	32	64	30	
Slovakia	7	71.0 / 78.6	3	100 / 98		94 / 95		19	74	41	
<b>NORTHERN EUROPE (12)</b>	<b>5</b>	<b>76.0 / 81.1</b>						<b>18</b>	<b>79</b>	<b>75</b>	
Denmark	5	75.5 / 80.0	5	101 / 101	100 / 100	121 / 127		6	78	72	0.3 / 0.1
Estonia	9	66.8 / 77.9	63	101 / 98	99 / 99	97 / 99	0 / 0	23	70	56	2.0 / 0.6
Finland	4	75.9 / 82.3	6	101 / 100	100 / 100	107 / 112		9	77	75	0.1 / 0.1
Ireland	5	75.9 / 81.0	5	107 / 106	100 / 100	108 / 116		12			0.3 / 0.2
Latvia	9	67.1 / 77.7	42	94 / 91		97 / 96	0 / 0	17	48	39	1.2 / 0.3
Lithuania	8	67.7 / 78.5	13	98 / 97		103 / 101	0 / 0	20	47	31	0.3 / 0.0
Norway	3	77.7 / 82.5	16	99 / 99	99 / 100	114 / 117		9	74	69	0.2 / 0.1
Sweden	3	78.6 / 82.9	2	99 / 99		101 / 105		7			0.3 / 0.1
United Kingdom	5	76.6 / 81.2	13	107 / 107		103 / 106		23	84	81	0.3 / 0.1
<b>SOUTHERN EUROPE (13)</b>	<b>6</b>	<b>75.8 / 82.2</b>						<b>11</b>	<b>69</b>	<b>49</b>	
Albania	23	71.6 / 77.3	55	106 / 105		79 / 77	1 / 2	16	75	8	
Bosnia and Herzegovina	12	72.0 / 77.4	31				1 / 6	22	48	16	
Croatia	6	72.2 / 79.1	8	95 / 94		87 / 89	1 / 3	14			
Greece	6	76.0 / 81.2	9	102 / 101		96 / 97	2 / 6	8			0.3 / 0.1
Italy	5	77.4 / 83.5	5	102 / 101	96 / 97	100 / 98	1 / 2	7	60	39	0.7 / 0.4
Macedonia (Former Yugoslav Republic of)	14	71.9 / 76.9	23	98 / 98		85 / 83	2 / 6	22			
Portugal	5	74.6 / 81.1	5	119 / 114		92 / 102		17			1.2 / 0.1
Serbia and Montenegro (14)	12	71.6 / 76.3	11	98 / 98		88 / 89	1 / 6	22	58	33	0.3 / 0.1
Slovenia	5	73.5 / 80.7	17	100 / 99		100 / 100		6	74	59	
Spain	4	76.5 / 83.7	4	109 / 107		116 / 123		9	81	67	0.9 / 0.3
<b>WESTERN EUROPE (15)</b>	<b>4</b>	<b>76.4 / 82.5</b>						<b>6</b>	<b>74</b>	<b>70</b>	
Austria	4	76.8 / 82.4	4	106 / 106		104 / 98		11	51	47	0.5 / 0.1
Belgium	4	76.4 / 82.6	10	104 / 104		111 / 107		7	78	74	0.3 / 0.2
France	4	76.5 / 83.4	17	105 / 104	98 / 97	110 / 111		1	75	69	0.6 / 0.3
Germany	4	76.3 / 82.1	8	100 / 100		101 / 99		9	75	72	0.2 / 0.1
Netherlands	4	76.2 / 81.6	16	109 / 106	100 / 99	120 / 118		4	79	76	0.3 / 0.2
Switzerland	4	78.2 / 83.7	7	103 / 102		97 / 89		4	82	78	0.6 / 0.3
<b>LATIN AMERICA &amp; CARIBBEAN</b>	<b>23</b>	<b>69.6 / 76.0</b>						<b>76</b>	<b>72</b>	<b>63</b>	
<b>CARIBBEAN (16)</b>	<b>31</b>	<b>66.4 / 70.8</b>						<b>63</b>	<b>62</b>	<b>58</b>	
Cuba	5	76.7 / 80.2	33	104 / 99	96 / 98	93 / 94	0 / 0	50	73	72	0.1 / 0.1

## Monitoring ICPD Goals - Selected Indicators

	Indicators of Mortality			Indicators of Education				Reproductive Health Indicators			
	Infant mortality Total per 1000 live births	Life expectancy M/F	Maternal mortality ratio	Primary enrolment (gross) M/F	Proportion reaching grade 5 M/F	Secondary enrolment (gross) M/F	% Illiterate (>15 years) M/F	Births per 1,000 women aged 15-19	Contraceptive Prevalence Any method	Modern methods	HIV prevalence rate (%) (15-49) M/F
Dominican Republic	30	65.2 / 72.1	150	115 / 110	58 / 86	64 / 78	13 / 13	89	70	66	1.1 / 1.1
Haiti	57	52.6 / 53.8	680					58	28	22	3.5 / 4.1
Jamaica	14	69.3 / 72.7	87	95 / 95	86 / 92	87 / 89	26 / 14	74	66	63	2.2 / 0.8
Puerto Rico	9	72.5 / 81.0	25					48	78	68	
Trinidad and Tobago	13	67.5 / 72.5	160	108 / 105	66 / 76	85 / 91		34	38	33	2.3 / 3.0
<b>CENTRAL AMERICA</b>	<b>20</b>	<b>72.1 / 77.2</b>						<b>73</b>	<b>66</b>	<b>58</b>	
Costa Rica	10	76.4 / 81.2	43	110 / 109	84 / 90	77 / 82	5 / 5	71	80	71	0.4 / 0.2
El Salvador	22	68.7 / 74.8	150	115 / 111	67 / 72	62 / 64		81	67	61	1.4 / 0.5
Guatemala	31	64.7 / 72.0	240	118 / 109	70 / 66	54 / 49	25 / 37	107	43	34	1.3 / 0.5
Honduras	29	67.0 / 71.1	110	113 / 113		58 / 73	20 / 20	93	62	51	2.3 / 0.8
Mexico	17	73.6 / 78.5	83	110 / 108	92 / 94	77 / 82	8 / 10	63	68	60	0.5 / 0.1
Nicaragua	26	68.5 / 73.3	230	113 / 110	51 / 56	62 / 71	23 / 23	113	69	66	0.4 / 0.1
Panama	18	73.0 / 78.2	160	113 / 109	85 / 86	68 / 73	7 / 9	83			1.3 / 0.5
<b>SOUTH AMERICA (17)</b>	<b>23</b>	<b>69.1 / 76.1</b>						<b>78</b>	<b>75</b>	<b>65</b>	
Argentina	13	71.5 / 79.0	82	113 / 112	84 / 85	84 / 89	3 / 3	57			0.9 / 0.3
Bolivia	47	63.3 / 67.5	420	113 / 113	85 / 85	90 / 87	7 / 19	78	58	35	0.2 / 0.1
Brazil	24	68.0 / 75.6	260	145 / 137		97 / 107	12 / 11	89	77	70	0.7 / 0.4
Chile	7	75.5 / 81.5	31	106 / 101	99 / 99	89 / 90	4 / 4	60			0.4 / 0.2
Colombia	22	70.3 / 76.2	130	114 / 112	81 / 86	75 / 83	7 / 7	73	77	64	0.9 / 0.3
Ecuador	21	72.1 / 78.0	130	117 / 117	75 / 77	61 / 61	8 / 10	83	66	50	0.2 / 0.3
Paraguay	34	69.6 / 74.1	170	108 / 104	80 / 83	62 / 63		60	73	61	0.5 / 0.2
Peru	29	68.6 / 73.8	410	114 / 114	90 / 90	91 / 92	7 / 18	51	71	47	0.8 / 0.3
Uruguay	12	72.6 / 79.7	27	110 / 108	87 / 90	100 / 116		69			0.4 / 0.6
Venezuela	16	70.7 / 76.7	96	106 / 104	88 / 95	70 / 79	7 / 7	90			1.0 / 0.4
<b>NORTHERN AMERICA (18)</b>	<b>6</b>	<b>75.4 / 80.8</b>						<b>45</b>	<b>73</b>	<b>69</b>	
Canada	5	78.1 / 83.0	6	100 / 100		110 / 107		12	75	73	0.5 / 0.2
United States of America	7	75.1 / 80.5	17	100 / 98		94 / 95		49	73	68	1.2 / 0.4
<b>OCEANIA</b>	<b>26</b>	<b>72.9 / 77.2</b>						<b>26</b>	<b>62</b>	<b>57</b>	
<b>AUSTRALIA-NEW ZEALAND</b>	<b>5</b>	<b>78.3 / 83.2</b>						<b>15</b>	<b>76</b>	<b>72</b>	
Australia (19)	5	78.4 / 83.4	8	103 / 103		152 / 145		13	76	72	0.3 / <0.1
Melanesia (20)	56	58.6 / 60.3						46			
New Zealand	5	77.6 / 81.9	7	102 / 102		114 / 122		21	75	72	
Papua New Guinea	65	56.4 / 57.5	300	80 / 70	68 / 68	29 / 23	37 / 49	49	26	20	1.4 / 2.2
<b>COUNTRIES WITH ECONOMIES IN TRANSITION OF THE FORMER USSR (21)</b>											
Armenia	29	68.4 / 75.1	55	92 / 96		87 / 89	0 / 1	29	61	22	0.2 / 0.1
Azerbaijan	73	63.7 / 71.1	94	97 / 95		84 / 81	1 / 2	30	55	12	0.2 / <0.1
Belarus	14	63.0 / 74.4	35	103 / 100		95 / 96	0 / 1	25	50	42	0.5 / 0.2
Georgia	39	67.0 / 74.7	32	93 / 94	76 / 83	82 / 83		30	47	27	0.4 / 0.1
Kazakhstan	59	58.6 / 69.7	210	110 / 108		100 / 97	0 / 1	27	66	53	0.2 / 0.3
Kyrgyzstan	52	63.5 / 71.9	110	98 / 97		86 / 87	1 / 2	31	60	49	0.2 / <0.1
Republic of Moldova	23	65.7 / 72.9	36	93 / 92		80 / 83	1 / 2	29	62	43	0.9 / 1.2
Russian Federation	16	58.7 / 71.8	67	123 / 123		93 / 93	0 / 1	28	65	47	1.7 / 0.5
Tajikistan	86	61.6 / 67.0	100	103 / 99		89 / 74	0 / 1	28	34	27	0.3 / <0.1
Turkmenistan	75	58.9 / 67.4	31				1 / 2	16	62	53	
Ukraine	15	60.5 / 72.5	35	107 / 107		92 / 85	0 / 1	28	68	38	1.6 / 1.3
Uzbekistan	56	63.9 / 70.3	24	100 / 99		96 / 93		34	68	63	0.4 / 0.1

## Demographic, Social and Economic Indicators

	Total population (millions) (2007)	Projected population (millions) (2050)	Ave. pop. growth rate (%) (2005-2010)	% urban (2007)	Urban growth rate (2005-2010)	Population/ha arable & perm. crop land	Total fertility rate (2007)	% births with skilled attendants	GNI per capita PPP\$ (2005)	Expenditures/primary student (% of GDP per capita)	Health expenditures, public (% of GDP)	External population assistance (US\$,000)	Under-5 mortality M/F	Per capita energy consumption	Access to improved drinking water sources
<b>World Total</b>	<b>6,615.9</b>	<b>9,075.9</b>	<b>1.1</b>	<b>50</b>	<b>2.0</b>		<b>2.56</b>	<b>62</b>	<b>9,420</b>			<b>(5,620,000)</b>	<b>80 / 77</b>	<b>1,734</b>	<b>83</b>
<b>More developed regions (*)</b>	<b>1,217.5</b>	<b>1,236.2</b>	<b>0.2</b>	<b>75</b>	<b>0.5</b>		<b>1.58</b>	<b>99</b>					<b>10 / 9</b>		
<b>Less developed regions (+)</b>	<b>5,398.4</b>	<b>7,839.7</b>	<b>1.3</b>	<b>44</b>	<b>2.5</b>		<b>2.76</b>	<b>57</b>					<b>87 / 85</b>		
<b>Least developed countries (‡)</b>	<b>795.6</b>	<b>1,735.4</b>	<b>2.3</b>	<b>28</b>	<b>4.0</b>		<b>4.74</b>	<b>34</b>	<b>1,427</b>				<b>155 / 144</b>	<b>306</b>	
<b>AFRICA (1)</b>	<b>945.3</b>	<b>1,937.0</b>	<b>2.1</b>	<b>39</b>	<b>3.2</b>		<b>4.71</b>	<b>47</b>				<b>1,623,468<sup>22</sup></b>	<b>155 / 143</b>		
<b>EASTERN AFRICA</b>	<b>301.5</b>	<b>678.7</b>	<b>2.3</b>	<b>23</b>	<b>3.7</b>		<b>5.28</b>	<b>35</b>					<b>153 / 138</b>		
Burundi	8.1	25.8	3.7	11	6.8	4.5	6.81	25	640	19.9	0.7	8,087	185 / 162		79
Eritrea	4.7	11.2	3.1	20	5.2	5.6	5.10	28	1,010	9.8	2.0	8,862	84 / 78		60
Ethiopia	81.2	170.2	2.3	16	4.0	4.9	5.47	6	1,000		3.4	66,657	164 / 149	299	22
Kenya	36.0	83.1	2.6	21	3.9	4.5	4.97	42	1,170	25.2	1.7	78,024	115 / 99	494	61
Madagascar	19.6	43.5	2.6	27	3.5	3.6	4.94	51	880	8.7	1.7	14,001	123 / 113		46
Malawi	13.5	29.5	2.2	18	4.7	3.6	5.72	61	650	14.4	3.3	93,661	172 / 162		73
Mauritius (2)	1.3	1.5	0.8	42	1.1	1.2	1.94	99	12,450	13.6	2.2	2,081	18 / 14		100
Mozambique	20.5	37.6	1.8	36	3.9	3.1	5.15	48	1,270		2.9	77,296	171 / 154	430	43
Rwanda	9.4	18.2	2.3	21	6.5	5.2	5.25	31	1,320	7.4	1.6	26,182	204 / 178		74
Somalia	8.8	21.3	3.1	36	4.3	6.4	6.09	34			1.2	3,682	192 / 182		29
Uganda	30.9	126.9	3.6	13	4.8	2.7	7.11	39	1,500	11.6	2.2	62,244	135 / 121		60
United Republic of Tanzania	39.7	66.8	1.8	25	3.5	5.6	4.51	46	730		2.4	104,482	169 / 153	465	62
Zambia	12.1	22.8	1.7	35	2.1	1.4	5.23	43	950	9.3	2.8	97,871	169 / 153	592	58
Zimbabwe	13.2	15.8	0.6	37	1.9	2.3	3.22	73	1,940	16.1	2.8	47,641	120 / 106	752	81
<b>MIDDLE AFRICA (3)</b>	<b>115.7</b>	<b>303.3</b>	<b>2.7</b>	<b>41</b>	<b>4.1</b>		<b>6.12</b>	<b>54</b>					<b>203 / 181</b>		
Angola	16.9	43.5	2.8	55	4.0	2.7	6.47	47	2,210		2.4	16,644	245 / 215	606	53
Cameroon	16.9	26.9	1.6	56	3.1	1.1	4.14	62	2,150	8.5	1.2	8,031	164 / 148	429	66
Central African Republic	4.2	6.7	1.4	38	1.9	1.3	4.62	44	1,140		1.5	2,502	183 / 151		75
Chad	10.3	31.5	2.7	26	4.4	1.7	6.66	14	1,470	11.0	2.6	5,800	206 / 183		42
Congo, Democratic Republic of the (4)	61.2	177.3	3.1	33	4.9	4.2	6.71	61	720		0.7	100,711	208 / 186	293	46
Congo, Republic of	4.2	13.7	2.9	61	3.6	2.6	6.30		810	7.9	1.3	9,179	113 / 90	273	58
Gabon	1.4	2.3	1.6	85	2.2	0.9	3.58	86	5,890		2.9	759	92 / 83	1,256	88
<b>NORTHERN AFRICA (5)</b>	<b>197.7</b>	<b>311.9</b>	<b>1.7</b>	<b>52</b>	<b>2.6</b>		<b>2.93</b>	<b>70</b>				<b>73,996<sup>23</sup></b>	<b>56 / 47</b>		
Algeria	33.9	49.5	1.5	65	2.5	0.9	2.39	92	6,770	11.3	3.3	1,029	35 / 31	1,036	85
Egypt	76.9	125.9	1.8	43	2.3	7.3	3.02	69	4,440		2.2	40,901	38 / 31	735	98
Libyan Arab Jamahiriya	6.1	9.6	1.9	85	2.2	0.1	2.75	94		3.0	2.6	53	18 / 18	3,191	
Morocco	32.4	46.4	1.4	60	2.5	1.1	2.59	63	4,360	19.3	1.7	9,345	44 / 30	378	81
Sudan	37.8	66.7	2.1	43	4.2	1.1	4.00	57	2,000		1.9	16,877	113 / 100	477	70
Tunisia	10.3	12.9	1.0	66	1.6	0.5	1.87	90	7,900	15.5	2.8	1,352	23 / 20	837	93
<b>SOUTHERN AFRICA</b>	<b>54.3</b>	<b>56.0</b>	<b>0.1</b>	<b>57</b>	<b>1.0</b>		<b>2.73</b>	<b>83</b>					<b>81 / 73</b>		
Botswana	1.8	1.7	-0.4	59	0.9	2.1	2.94	94	10,250	6.2	3.3	12,584	103 / 92		95
Lesotho	1.8	1.6	-0.3	19	1.1	2.1	3.30	55	3,410	20.8	4.1	3,087	119 / 106		79
Namibia	2.1	3.1	1.0	36	2.6	1.1	3.50	76	7,910	21.3	4.7	13,799	75 / 68	635	87
South Africa	47.7	48.7	0.2	60	1.0	0.4	2.65	84	12,120	13.7	3.2	79,051	77 / 70	2,587	88
Swaziland	1.0	1.0	-0.4	25	0.7	1.8	3.52	70	5,190	11.0	3.3	2,173	144 / 126		62
<b>WESTERN AFRICA (6)</b>	<b>276.1</b>	<b>587.0</b>	<b>2.3</b>	<b>44</b>	<b>3.7</b>		<b>5.40</b>	<b>41</b>					<b>186 / 178</b>		
Benin	9.0	22.1	3.0	41	4.0	1.2	5.46	66	1,110	12.2	1.9	19,965	149 / 145	292	67
Burkina Faso	14.0	39.1	2.9	19	5.1	2.4	6.38	57	1,220		2.6	14,729	191 / 180		61
Côte d'Ivoire	18.8	34.0	1.7	46	2.7	1.1	4.52	63	1,490	16.0	1.0	14,879	193 / 174	374	84
Gambia	1.6	3.1	2.3	56	3.9	3.5	4.23	55	1,920	7.1	3.2	1,037	117 / 106		82

	Total population (millions) (2007)	Projected population (millions) (2050)	Ave. pop. growth rate (%) (2005-2010)	% urban (2007)	Urban growth rate (2005-2010)	Population/ha arable & perm. crop land	Total fertility rate (2007)	% births with skilled attendants	GNI per capita PPP\$ (2005)	Expenditures/primary student (% of GDP per capita)	Health expenditures, public (% of GDP)	External population assistance (US\$,000)	Under-5 mortality M/F	Per capita energy consumption	Access to improved drinking water sources
Ghana	23.0	40.6	1.9	49	3.4	1.8	3.90	47	2,370		1.4	55,629	92 / 88	400	75
Guinea	9.8	23.0	2.2	34	3.6	4.0	5.55	35	2,240	10.3	0.9	13,114	145 / 149		50
Guinea-Bissau	1.7	5.3	2.9	30	3.2	2.2	7.08	35	700		2.6	5,226	206 / 183		59
Liberia	3.5	10.7	2.9	60	4.1	3.7	6.78	51			2.7	2,308	217 / 200		61
Mali	14.3	42.0	2.9	32	4.7	2.2	6.62	41	1,000	15.8	2.8	49,227	209 / 203		50
Mauritania	3.2	7.5	2.7	41	3.3	3.0	5.49	57	2,150	14.4	3.2	12,127	147 / 135		53
Niger	14.9	50.2	3.3	17	4.4	0.7	7.56	16	800	19.0	2.5	7,705	245 / 250		46
Nigeria	137.2	258.1	2.1	50	3.7	1.1	5.38	35	1,040		1.3	125,196	193 / 185	777	48
Senegal	12.2	23.1	2.3	42	2.9	2.9	4.52	58	1,770	16.0	2.1	24,733	124 / 118	287	76
Sierra Leone	5.8	13.8	2.1	42	3.8	4.7	6.48	42	780	21.5	2.0	6,875	291 / 265		57
Togo	6.5	13.5	2.5	42	4.3	1.1	4.86	49	1,550	6.7	1.4	2,600	136 / 119	445	52
<b>ASIA</b>	<b>3,995.7</b>	<b>5,217.2</b>	<b>1.1</b>	<b>41</b>	<b>2.4</b>		<b>2.36</b>	<b>58</b>				<b>633,053</b>	<b>64 / 66</b>		
<b>EASTERN ASIA (7)</b>	<b>1,540.9</b>	<b>1,586.7</b>	<b>0.5</b>	<b>46</b>	<b>2.2</b>		<b>1.69</b>	<b>97</b>					<b>29 / 38</b>		
China	1,331.4	1,392.3	0.6	42	2.7	5.5	1.73	83	6,600		2.0	31,879	30 / 41	1,094	77
Democratic People's Republic of Korea	22.7	24.2	0.4	62	0.9	2.2	1.94	97			5.3	1,419	56 / 49	896	100
Hong Kong SAR, China (8)	7.2	9.2	1.0	100	1.0		0.95	100	34,670	16.0			5 / 4	2,428	
Japan	128.3	112.2	0.1	66	0.4	0.9	1.36	100	31,410	22.2	6.4	(442,186) <sup>24</sup>	5 / 4	4,053	100
Mongolia	2.7	3.6	1.2	57	1.5	0.5	2.23	99	2,190	15.7	4.3	2,277	75 / 71		62
Republic of Korea	48.1	44.6	0.3	81	0.6	1.9	1.19	100	21,850	16.3	2.8		5 / 5	4,291	92
<b>SOUTH-EASTERN ASIA</b>	<b>570.2</b>	<b>752.3</b>	<b>1.2</b>	<b>45</b>	<b>3.0</b>		<b>2.33</b>	<b>69</b>					<b>49 / 39</b>		
Cambodia	14.6	26.0	2.0	21	4.9	2.6	3.76	32	2,490	6.5	2.1	36,508	130 / 120		41
Indonesia	228.1	284.6	1.1	50	3.3	2.7	2.22	66	3,720	2.9	1.1	52,100	46 / 37	753	77
Lao People's Democratic Republic	6.2	11.6	2.2	21	4.0	4.2	4.33	19	2,020	6.7	1.2	2,733	129 / 123		51
Malaysia	26.2	38.9	1.7	69	2.9	0.5	2.65	97	10,320	20.2	2.2	4,131	12 / 10	2,318	99
Myanmar	51.5	63.7	0.9	32	2.9	3.1	2.11	56			0.5	10,739	107 / 89	276	78
Philippines	85.9	127.1	1.6	64	2.8	2.8	2.87	60	5,300	11.1	1.4	43,596	33 / 22	525	85
Singapore	4.4	5.2	1.2	100	1.2	2.5	1.30	100	29,780		1.6		4 / 4	5,359	100
Thailand	65.3	74.6	0.8	33	1.8	1.7	1.87	99	8,440	13.8	2.0	10,291	26 / 16	1,406	99
Timor-Leste, Democratic Republic of	1.1	3.3	5.5	27	7.0	3.3	7.39	24			7.3	3,562	118 / 110		58
Viet Nam	86.4	116.7	1.3	27	3.0	6.0	2.15	85	3,010		1.5	31,873	36 / 27	544	85
<b>SOUTH CENTRAL ASIA</b>	<b>1,661.9</b>	<b>2,495.0</b>	<b>1.5</b>	<b>31</b>	<b>2.5</b>		<b>2.92</b>	<b>39</b>					<b>87 / 90</b>		
Afghanistan	32.3	97.3	3.5	24	5.1	2.0	7.11	14			2.6	15,257	234 / 240		39
Bangladesh	147.1	242.9	1.8	26	3.5	9.2	2.98	13	2,090	7.2	1.1	71,347	65 / 64	159	74
Bhutan	2.3	4.4	2.2	12	5.1	16.5	3.89	24			2.6	4,713	71 / 68		62
India	1,135.6	1,592.7	1.4	29	2.3	3.3	2.79	43	3,460	12.5	1.2	99,173	84 / 88	520	86
Iran (Islamic Republic of)	71.2	101.9	1.3	68	2.1	0.9	2.03	90	8,050	10.5	3.1	2,481	32 / 31	2,055	94
Nepal	28.2	51.2	1.9	17	4.8	9.4	3.32	11	1,530	12.7	1.5	26,296	71 / 75	336	90
Pakistan	164.6	304.7	2.1	36	3.3	3.8	3.77	23	2,350		0.7	39,983	95 / 106	467	91
Sri Lanka	21.1	23.6	0.8	15	0.8	4.5	1.87	97	4,520		1.6	14,038	20 / 13	421	79
<b>WESTERN ASIA</b>	<b>222.8</b>	<b>383.2</b>	<b>1.9</b>	<b>65</b>	<b>2.2</b>		<b>3.13</b>	<b>73</b>				<b>77,079<sup>25</sup></b>	<b>56 / 48</b>		
Iraq	30.3	63.7	2.4	67	2.3	0.4	4.30	72			1.4	18,859	109 / 102	943	81
Israel	7.0	10.4	1.7	92	1.7	0.4	2.68		25,280	23.0	6.1	54	6 / 5	3,086	100
Jordan	6.0	10.2	2.1	83	2.5	1.4	3.15	100	5,280	15.2	4.2	26,270	23 / 21	1,027	97
Kuwait	2.8	5.3	2.5	98	2.5	1.5	2.27	100		25.9	2.7		11 / 11	9,566	
Lebanon	3.7	4.7	1.1	87	1.2	0.4	2.21	93	5,740	5.1	3.0	1,712	27 / 17	1,700	100
Occupied Palestinian Territory	3.9	10.1	3.1	72	3.3	2.0	5.06	97				10,157	23 / 18		92

## Demographic, Social and Economic Indicators

	Total population (millions) (2007)	Projected population (millions) (2050)	Ave. pop. growth rate (%) (2005-2010)	% urban (2007)	Urban growth rate (2005-2010)	Population/ha arable & perm. crop land	Total fertility rate (2007)	% births with skilled attendants	GNI per capita PPP\$ (2005)	Expenditures/primary student (% of GDP per capita)	Health expenditures, public (% of GDP)	External population assistance (US\$,000)	Under-5 mortality M/F	Per capita energy consumption	Access to improved drinking water sources
Oman	2.7	5.0	2.2	72	2.2	12.2	3.23	95		13.1	2.7	6	16 / 15	4,975	
Saudi Arabia	25.8	49.5	2.4	81	2.6	0.5	3.62	93	14,740	31.9	2.5	4	25 / 17	5,607	
Syrian Arab Republic	20.0	35.9	2.4	51	2.8	0.9	3.11	70	3,740	14.5	2.5	2,568	20 / 16	986	93
Turkey (10)	75.2	101.2	1.3	68	2.0	0.8	2.32	83	8,420	13.9	5.4	1,556	47 / 37	1,117	96
United Arab Emirates	4.8	9.1	2.3	77	2.3	0.5	2.36	100		7.7	2.5	4	9 / 8	9,707	100
Yemen	22.3	59.5	3.1	28	4.6	5.7	5.70	22	920		2.2	10,836	83 / 75	289	67
<b>ARAB STATES (11)</b>	<b>335.0</b>	<b>598.5</b>	<b>2.1</b>	<b>56</b>	<b>2.8</b>	<b>1.5</b>	<b>3.40</b>	<b>67</b>	<b>5,199</b>	<b>15.3</b>	<b>2.5</b>	<b>157,296</b>	<b>54 / 48</b>	<b>1,472</b>	<b>75</b>
<b>EUROPE</b>	<b>727.7</b>	<b>653.3</b>	<b>-0.1</b>	<b>72</b>	<b>0.1</b>		<b>1.43</b>	<b>99</b>					<b>12 / 10</b>		
<b>EASTERN EUROPE</b>	<b>294.5</b>	<b>223.5</b>	<b>-0.5</b>	<b>68</b>	<b>-0.4</b>		<b>1.30</b>	<b>99</b>				<b>70,202<sup>23, 25</sup></b>	<b>20 / 16</b>		
Bulgaria	7.6	5.1	-0.7	71	-0.4	0.1	1.23	99	8,630	16.2	4.1	837	16 / 14	2,494	99
Czech Republic	10.2	8.5	-0.1	73	-0.1	0.2	1.21	100	20,140	12.0	6.8	487	6 / 5	4,324	100
Hungary	10.0	8.3	-0.3	67	0.3	0.2	1.28	100	16,940	20.8	6.1	116	11 / 9	2,600	99
Poland	38.5	31.9	-0.1	62	0.2	0.5	1.23	100	13,490	23.5	4.5	498	10 / 9	2,452	
Romania	21.5	16.8	-0.4	54	0.0	0.3	1.25	98	8,940	9.9	3.8	9,414	23 / 17	1,794	57
Slovakia	5.4	4.6	0.0	56	0.2	0.3	1.18	99	15,760	11.3	5.2	481	9 / 9	3,443	100
<b>NORTHERN EUROPE (12)</b>	<b>96.4</b>	<b>105.6</b>	<b>0.3</b>	<b>84</b>	<b>0.4</b>		<b>1.67</b>	<b>99</b>					<b>6 / 6</b>		
Denmark	5.5	5.9	0.3	86	0.4	0.1	1.76		33,570	24.9	7.5	(27,410)	6 / 6	3,853	100
Estonia	1.3	1.1	-0.3	69	-0.2	0.2	1.43	100	15,420	19.8	4.1	43	13 / 9	3,631	100
Finland	5.3	5.3	0.2	61	0.4	0.1	1.72	100	31,170	18.3	5.7	(23,697)	5 / 4	7,204	100
Ireland	4.3	5.8	1.3	61	1.8	0.3	1.95	100	34,720	12.4	5.8	(278,645)	6 / 6	3,777	
Latvia	2.3	1.7	-0.5	68	-0.4	0.1	1.29	100	13,480	22.4	3.3	71	14 / 12	1,881	99
Lithuania	3.4	2.6	-0.4	66	-0.5	0.2	1.25	100	14,220		5.0	645	13 / 9	2,585	
Norway	4.7	5.4	0.5	78	0.6	0.2	1.79		40,420	20.5	8.6	(37,039)	4 / 4	5,100	100
Sweden	9.1	10.1	0.3	84	0.4	0.1	1.71		31,420	24.4	8.0	(661,101)	4 / 4	5,754	100
United Kingdom	60.0	67.1	0.3	90	0.4	0.2	1.66	99	32,690	16.4	6.9	(589,650)	6 / 6	3,893	100
<b>SOUTHERN EUROPE (13)</b>	<b>150.2</b>	<b>138.7</b>	<b>0.2</b>	<b>67</b>	<b>0.5</b>		<b>1.39</b>	<b>98</b>					<b>8 / 7</b>		
Albania	3.2	3.5	0.5	47	2.1	2.1	2.19	94	5,420	7.7	2.7	7,056	32 / 28	674	96
Bosnia and Herzegovina	3.9	3.2	0.1	47	1.4	0.2	1.29	100	7,790		4.8	1,751	15 / 13	1,136	97
Croatia	4.6	3.7	-0.1	57	0.4	0.2	1.34	100	12,750	24.0	6.5	241	8 / 7	1,976	100
Greece	11.2	10.7	0.2	59	0.4	0.3	1.25		23,620	15.6	5.1	(24,107)	8 / 7	2,709	
Italy	58.2	50.9	0.0	68	0.2	0.2	1.37		28,840	25.4	6.3	(13,214)	6 / 6	3,140	
Macedonia (Former Yugoslav Republic of)	2.0	1.9	0.1	70	1.1	0.4	1.45	98	7,080	23.6	6.0	854	17 / 16		
Portugal	10.6	10.7	0.4	59	1.5	0.6	1.47	100	19,730	24.0	6.7	(196,894)	7 / 7	2,469	
Serbia and Montenegro (14)	10.5	9.4	0.0	53	0.4	0.5	1.59	93			7.2	626	15 / 13	1,991	93
Slovenia	2.0	1.6	-0.1	51	0.2	0.1	1.21	100	22,160		6.7	28	7 / 7	3,518	
Spain	43.6	42.5	0.4	77	0.6	0.1	1.34		25,820	19.2	5.5	(31,872)	6 / 5	3,240	100
<b>WESTERN EUROPE (15)</b>	<b>186.6</b>	<b>185.5</b>	<b>0.2</b>	<b>77</b>	<b>0.4</b>		<b>1.56</b>	<b>100</b>					<b>6 / 5</b>		
Austria	8.2	8.1	0.1	66	0.3	0.3	1.40		33,140	23.9	5.1	(101,131)	6 / 5	4,086	100
Belgium	10.5	10.3	0.1	97	0.2	0.2	1.66		32,640	19.0	6.3	(89,798)	6 / 5	5,701	
France	60.9	63.1	0.3	77	0.6	0.1	1.86		30,540	17.8	7.7	(6,349)	6 / 5	4,519	100
Germany	82.7	78.8	0.0	75	0.1	0.1	1.34		29,210	16.7	8.7	(26,029) <sup>26</sup>	5 / 5	4,205	100
Netherlands	16.4	17.1	0.4	81	1.0	0.5	1.73	100	32,480	18.0	6.1	(166,276)	7 / 6	4,982	100
Switzerland	7.3	7.3	0.1	76	0.6	1.0	1.40		37,080	24.3	6.7	(1,807,643)	6 / 5	3,689	100
<b>LATIN AMERICA &amp; CARIBBEAN</b>	<b>576.5</b>	<b>782.9</b>	<b>1.3</b>	<b>78</b>	<b>1.7</b>		<b>2.40</b>	<b>83</b>				<b>250,207</b>	<b>33 / 27</b>		
<b>CARIBBEAN (16)</b>	<b>39.8</b>	<b>46.4</b>	<b>0.8</b>	<b>65</b>	<b>1.3</b>		<b>2.38</b>	<b>74</b>					<b>54 / 46</b>		
Cuba	11.3	9.7	0.2	75	0.0	0.5	1.63	100		30.9	6.3	1,431	6 / 6	1,000	91

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Dominican Republic	9.1	12.7	1.4	68	2.4	0.9	2.58	99	7,150	5.0	2.3	7,560	48 / 39	923	95
Haiti	8.8	13.0	1.4	40	3.0	4.6	3.63	24	1,840		2.9	26,152	108 / 93	270	54
Jamaica	2.7	2.6	0.4	54	1.0	1.8	2.32	95	4,110	15.5	2.7	5,067	21 / 18	1,543	93
Puerto Rico	4.0	4.4	0.5	98	0.8	1.1	1.86	100					12 / 10		
Trinidad and Tobago	1.3	1.2	0.3	13	2.8	0.9	1.61	96	13,170	16.0	1.5	627	20 / 16	8,553	91
<b>CENTRAL AMERICA</b>	<b>151.3</b>	<b>209.6</b>	<b>1.4</b>	<b>71</b>	<b>1.8</b>		<b>2.44</b>	<b>77</b>					<b>29 / 23</b>		
Costa Rica	4.5	6.4	1.5	63	2.3	1.5	2.11	98	9,680	17.1	5.8	576	13 / 10	880	97
El Salvador	7.1	10.8	1.6	60	2.1	2.2	2.70	69	5,120	9.4	3.7	8,270	32 / 26	675	84
Guatemala	13.2	25.6	2.4	48	3.4	2.9	4.20	41	4,410	4.7	2.1	16,968	48 / 36	608	95
Honduras	7.5	12.8	2.1	47	3.1	1.6	3.34	56	2,900		4.0	10,403	48 / 38	522	87
Mexico	109.6	139.0	1.1	77	1.5	0.8	2.17	86	10,030	14.4	2.9	13,083	22 / 18	1,564	97
Nicaragua	5.7	9.4	2.0	60	2.6	0.5	2.96	67	3,650	9.1	3.7	20,728	39 / 31	588	79
Panama	3.3	5.1	1.6	73	2.7	1.0	2.58	93	7,310	9.9	5.0	836	27 / 20	836	90
<b>SOUTH AMERICA (17)</b>	<b>385.4</b>	<b>526.9</b>	<b>1.3</b>	<b>82</b>	<b>1.7</b>		<b>2.38</b>	<b>87</b>					<b>33 / 26</b>		
Argentina	39.5	51.4	1.0	90	1.2	0.1	2.25	99	13,920	10.9	4.3	1,303	17 / 14	1,575	96
Bolivia	9.5	14.9	1.8	65	2.5	1.1	3.55	61	2,740	16.4	4.3	11,874	65 / 56	504	85
Brazil	191.3	253.1	1.3	85	1.8	0.4	2.25	88	8,230	11.3	3.4	19,236	34 / 26	1,065	90
Chile	16.6	20.7	1.0	88	1.3	1.0	1.94	100	11,470	15.3	3.0	717	10 / 8	1,647	95
Colombia	47.0	65.7	1.4	73	1.8	2.2	2.48	91	7,420	16.7	6.4	3,076	30 / 26	642	93
Ecuador	13.6	19.2	1.4	64	2.2	1.1	2.60	69	4,070	3.2	2.0	3,966	29 / 22	708	94
Paraguay	6.4	12.1	2.2	60	3.2	0.7	3.57	77	4,970	12.3	2.3	3,673	46 / 36	679	86
Peru	28.8	42.6	1.4	73	1.7	1.8	2.67	71	5,830	6.4	2.1	23,767	50 / 41	442	83
Uruguay	3.5	4.0	0.6	92	0.8	0.3	2.22	99	9,810	7.9	2.7	571	16 / 12	738	100
Venezuela	27.7	42.0	1.7	94	2.0	0.6	2.56	94	6,440		2.0	1,096	28 / 24	2,112	83
<b>NORTHERN AMERICA (18)</b>	<b>336.8</b>	<b>438.0</b>	<b>0.9</b>	<b>81</b>	<b>1.3</b>		<b>1.98</b>	<b>99</b>					<b>8 / 8</b>		
Canada	32.9	42.8	0.9	80	1.0	0.0	1.47	98	32,220		6.9	(159,248)	6 / 6	8,240	100
United States of America	303.9	395.0	0.9	81	1.3	0.0	2.04	99	41,950	21.8	6.8	(4,536,582)	8 / 8	7,843	100
<b>OCEANIA</b>	<b>33.9</b>	<b>47.6</b>	<b>1.2</b>	<b>71</b>	<b>1.3</b>		<b>2.24</b>	<b>84</b>					<b>33 / 36</b>		
<b>AUSTRALIA-NEW ZEALAND</b>	<b>24.7</b>	<b>32.7</b>	<b>1.0</b>	<b>88</b>	<b>1.2</b>		<b>1.78</b>	<b>100</b>					<b>6 / 5</b>		
Australia (19)	20.6	27.9	1.0	89	1.2	0.0	1.75	99	30,610	16.4	6.4	(49,877)	6 / 5	5,668	100
Melanesia (20)	7.9	13.2	1.7	20	2.5		3.51	61					73 / 80		
New Zealand	4.1	4.8	0.7	86	0.8	0.1	1.95	100	23,030	18.7	6.3	(3,979)	7 / 6	4,333	
Papua New Guinea	6.1	10.6	1.8	14	2.7	4.9	3.64	53	2,370		3.0	13,993	82 / 93		39
<b>COUNTRIES WITH ECONOMIES IN TRANSITION OF THE FORMER USSR (21)</b>															
Armenia	3.0	2.5	-0.2	64	-0.3	0.6	1.33	97	5,060	8.9	1.2	1,540	36 / 31	660	92
Azerbaijan	8.5	9.6	0.8	52	0.9	1.1	1.83	84	4,890	7.6	0.9	1,166	90 / 81	1,493	77
Belarus	9.6	7.0	-0.6	73	0.1	0.2	1.22	100	7,890	13.7	4.9	589	20 / 14	2,613	100
Georgia	4.4	3.0	-0.8	52	-0.6	0.9	1.40	96	3,270		1.0	2,871	45 / 37	597	82
Kazakhstan	14.8	13.1	0.0	58	0.4	0.1	1.86	99	7,730	10.1	2.0	3,948	86 / 60	3,342	86
Kyrgyzstan	5.4	6.7	1.1	36	1.6	0.9	2.49	98	1,870	7.7	2.2	3,590	67 / 56	528	77
Republic of Moldova	4.2	3.3	-0.2	47	0.3	0.4	1.20	99	2,150	17.1	3.9	2,436	30 / 26	772	92
Russian Federation	141.9	111.8	-0.4	73	-0.6	0.1	1.40	99	10,640		3.3	19,588	24 / 18	4,424	97
Tajikistan	6.7	10.4	1.4	24	1.1	1.9	3.39	71	1,260	6.7	0.9	2,469	116 / 103	501	59
Turkmenistan	5.0	6.8	1.3	47	2.1	0.7	2.52	97			2.6	1,277	104 / 85	3,662	72
Ukraine	45.5	26.4	-1.0	68	-0.7	0.2	1.14	99	6,720	10.4	3.8	10,964	19 / 14	2,772	96
Uzbekistan	27.4	38.7	1.4	37	1.6	1.3	2.51	96	2,020		2.4	8,763	72 / 60	2,023	82

## Selected Indicators for Less Populous Countries/Territories

### Monitoring ICPD Goals – Selected Indicators

	Indicators of Mortality			Indicators of Education		Reproductive Health Indicators			
	Infant mortality Total per 1000 live births	Life expectancy M/F	Maternal mortality ratio	Primary enrolment (gross) M/F	Secondary enrolment (gross) M/F	Births per 1,000 women aged 15-19	Contraceptive Prevalence Any method	Modern methods	HIV prevalence rate (%) (15-49) M/F
Bahamas	12	68.7 / 75.0	60	101 / 101	90 / 91	58	62	60	2.6 / 4.0
Bahrain	12	73.8 / 76.6	28	105 / 104	96 / 102	17	62	31	
Barbados	10	72.9 / 79.1	95	108 / 108	113 / 113	42	55	53	2.3 / 0.8
Belize	29	69.4 / 74.1	140	126 / 123	86 / 87	76	47	42	3.6 / 1.4
Brunei Darussalam	6	74.9 / 79.6	37	108 / 107	94 / 98	27			0.1 / <0.1
Cape Verde	25	68.1 / 74.3	150	111 / 105	65 / 70	83	53	46	
Comoros	49	62.8 / 67.2	480	91 / 80	40 / 30	49	26	19	<0.1 / <0.1
Cyprus	6	76.6 / 81.6	47	98 / 97	96 / 99	8			
Djibouti	85	52.7 / 54.8	730	44 / 36	29 / 19	49			2.5 / 3.7
Equatorial Guinea	95	41.6 / 41.8	880	117 / 111	38 / 22	182			2.6 / 3.8
Fiji	20	66.4 / 70.9	75	107 / 105	85 / 91	31			0.2 / <0.1
French Polynesia	8	71.6 / 76.7	20			34			
Guadeloupe	7	75.8 / 82.3	5			18			
Guam	9	73.2 / 77.9	12			61			
Guyana	44	62.0 / 68.2	170	134 / 131	103 / 101	57	37	36	2.0 / 2.9
Iceland	3	79.5 / 83.2	0	101 / 98	107 / 109	15			0.2 / 0.1
Luxembourg	5	75.8 / 82.1	28	100 / 99	92 / 98	8			
Maldives	35	68.5 / 68.1	110	95 / 93	68 / 78	54	42	33	
Malta	7	76.5 / 81.3	21	103 / 102	109 / 102	14			
Martinique	7	76.2 / 82.2	4			30			
Micronesia (27)	26	69.7 / 74.2				42			
Netherlands Antilles	12	73.6 / 79.7	20	127 / 124	83 / 90	22			
New Caledonia	6	73.5 / 78.7	10			29			
Polynesia (28)	17	70.4 / 75.6				28			
Qatar	10	72.1 / 76.9	7	106 / 106	101 / 99	18	43	32	
Réunion	7	72.0 / 80.1	41			35	67	62	
Samoa	23	68.4 / 74.7	130	100 / 100	76 / 85	27			
Solomon Islands	32	62.5 / 64.2	130	98 / 92	32 / 27	40			
Suriname	23	66.9 / 73.2	110	120 / 120	75 / 100	40	42	41	2.8 / 1.1
Vanuatu	28	68.1 / 72.0	130	120 / 116	44 / 38	43			

## Selected Indicators for Less Populous Countries/Territories

### Demographic, Social and Economic Indicators

	Total population (thousands) (2007)	Projected population (thousands) (2050)	% urban (2007)	Urban growth rate (2005-2010)	Population/ha arable & perm. crop land	Total fertility rate (2007)	% births with skilled attendants	GNI per capita PPP\$ (2005)	Under-5 mortality M/F
Bahamas	332	466	90.9	1.5	0.8	2.21	99		16 / 11
Bahrain	751	1,155	97.0	1.9	1.2	2.28	99	21,290	15 / 15
Barbados	271	255	53.9	1.3	0.6	1.50	100		12 / 10
Belize	280	442	48.7	2.3	0.7	2.85	84	6,740	40 / 37
Brunei Darussalam	390	681	74.4	2.6	0.1	2.32	100		7 / 6
Cape Verde	530	1,002	58.8	3.5	2.0	3.41	89	6,000	39 / 20
Comoros	841	1,781	38.3	4.3	4.2	4.36	62	2,000	71 / 54
Cyprus	854	1,174	69.7	1.3	0.4	1.59			8 / 6
Djibouti	820	1,547	87.0	2.1		4.56	61	2,240	133 / 117
Equatorial Guinea	527	1,146	39.2	2.6	1.5	5.90	65		178 / 161
Fiji	861	934	51.8	1.7	1.1	2.72	99	5,960	25 / 24
French Polynesia	264	360	51.6	1.3		2.27	99		11 / 11
Guadeloupe	455	474	99.8	0.6	0.5	1.99	100		10 / 8
Guam	175	254	94.3	1.6		2.70	99		11 / 9
Guyana	752	488	28.2	0.2	0.2	2.13	86	4,230	68 / 50
Iceland	300	370	93.0	0.9	3.1	1.93		34,760	4 / 4
Luxembourg	477	721	82.5	1.1	0.1	1.74	100	65,340	7 / 6
Maldives	346	682	30.5	4.0	5.9	3.81	70		37 / 48
Malta	405	428	95.8	0.7	0.5	1.48		18,960	8 / 8
Martinique	399	350	98.0	0.3	0.7	1.92	100		9 / 8
Micronesia (27)	575	849	68.5	2.1		3.21	94		35 / 27
Netherlands Antilles	185	203	70.9	1.0	0.1	2.05			16 / 10
New Caledonia	245	382	64.4	2.2	7.9	2.31			8 / 9
Polynesia (28)	669	763	42.5	1.5		2.98	98		21 / 19
Qatar	857	1,330	95.6	2.0	0.3	2.81	100		13 / 11
Réunion	807	1,092	93.1	1.6	0.5	2.46			10 / 9
Samoa	187	157	22.7	1.3		3.99	100	6,480	28 / 25
Solomon Islands	502	921	17.6	4.1	4.5	3.84	85	1,880	55 / 49
Suriname	455	429	74.6	1.0	1.2	2.46	85		33 / 21
Vanuatu	219	375	24.3	3.6		3.73	87	3,170	39 / 29

## Notes for Indicators

*The designations employed in this publication do not imply the expression of any opinion on the part of the United Nations Population Fund concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.*

*Data for small countries or areas, generally those with population of 200,000 or less in 1990, are not given in this table separately. They have been included in their regional population figures.*

- (\*) More-developed regions comprise North America, Japan, Europe and Australia-New Zealand.
- (+) Less-developed regions comprise all regions of Africa, Latin America and Caribbean, Asia (excluding Japan), and Melanesia, Micronesia and Polynesia.
- (‡) Least-developed countries according to standard United Nations designation.
- (1) Including British Indian Ocean Territory and Seychelles.
- (2) Including Agalesa, Rodrigues and St. Brandon.
- (3) Including Sao Tome and Principe.
- (4) Formerly Zaire.
- (5) Including Western Sahara.
- (6) Including St. Helena, Ascension and Tristan da Cunha.
- (7) Including Macau.
- (8) On 1 July 1997, Hong Kong became a Special Administrative Region (SAR) of China.
- (9) This entry is included in the more developed regions aggregate but not in the estimate for the geographical region.
- (10) Turkey is included in Western Asia for geographical reasons. Other classifications include this country in Europe.
- (11) Comprising Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Mauritania, Morocco, Occupied Palestinian Territory, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates and Yemen. Regional aggregation for demographic indicators provided by the UN Population Division. Aggregations for other indicators are weighted averages based on countries with available data.
- (12) Including Channel Islands, Faeroe Islands and Isle of Man.
- (13) Including Andorra, Gibraltar, Holy See and San Marino.
- (14) Following the Declaration of Independence adopted by the National Assembly of Montenegro on 3 June 2006, the membership of former Serbia and Montenegro in the United Nations was continued by Serbia, and, on 28 June 2006, Montenegro was admitted as the 192nd State Member of the United Nations. However, since data for the two States have not yet been disaggregated, the aggregate value is presented here.
- (15) Including Liechtenstein and Monaco.
- (16) Including Anguilla, Antigua and Barbuda, Aruba, British Virgin Islands, Cayman Islands, Dominica, Grenada, Montserrat, Netherlands Antilles, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Turks and Caicos Islands, and United States Virgin Islands.
- (17) Including Falkland Islands (Malvinas) and French Guiana.
- (18) Including Bermuda, Greenland, and St. Pierre and Miquelon.
- (19) Including Christmas Island, Cocos (Keeling) Islands and Norfolk Island.
- (20) Including New Caledonia and Vanuatu.
- (21) The successor States of the former USSR are grouped under existing regions. Eastern Europe includes Belarus, Republic of Moldova, Russian Federation and Ukraine. Western Asia includes Armenia, Azerbaijan and Georgia. South Central Asia includes Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. Regional total, excluding subregion reported separately below.
- (22) Regional total, excluding subregion reported separately below.
- (23) These subregions are included in the UNFPA Arab States and Europe region.
- (24) Estimates based on previous years' reports. Updated data are expected.
- (25) Total for Eastern Europe includes some South European Balkan States and Northern European Baltic States.
- (26) More recent reports suggest this figure might have been higher. Future publications will reflect the evaluation of this information.
- (27) Comprising Federated States of Micronesia, Guam, Kiribati, Marshall Islands, Nauru, Northern Mariana Islands, and Pacific Islands (Palau).
- (28) Comprising American Samoa, Cook Islands, Johnston Island, Pitcairn, Samoa, Tokelau, Tonga, Midway Islands, Tuvalu, and Wallis and Futuna Islands.

Note on population data: The Indicator tables went to press before *World Population Prospects: The 2006 Revision* was released. For the latest demographic figures, please visit the website of the United Nations Population Division: [www.un.org/esa/population/unpop.htm](http://www.un.org/esa/population/unpop.htm).

## Technical Notes

The statistical tables in this year's *The State of World Population* report once again give special attention to indicators that can help track progress in meeting the quantitative and qualitative goals of the International Conference on Population and Development (ICPD) and the Millennium Development Goals (MDGs) in the areas of mortality reduction, access to education, access to reproductive health services including family planning, and HIV/AIDS prevalence among young people. The sources for the indicators and their rationale for selection follow, by category.

### Monitoring ICPD Goals

#### INDICATORS OF MORTALITY

##### **Infant mortality, male and female life expectancy at birth.**

Source: Spreadsheets provided by the United Nations Population Division. These indicators are measures of mortality levels, respectively, in the first year of life (which is most sensitive to development levels) and over the entire lifespan. Data estimates are for 2007.

**Maternal mortality ratio.** Source: WHO, UNICEF, and UNFPA. 2003. *Maternal Mortality in 2000: Estimates Developed by WHO, UNICEF, and UNFPA*. Geneva: WHO. This indicator presents the number of deaths to women per 100,000 live births which result from conditions related to pregnancy, delivery and related complications. Precision is difficult, though relative magnitudes are informative. Estimates below 50 are not rounded; those 50-100 are rounded to the nearest 5; 100-1,000, to the nearest 10; and above 1,000, to the nearest 100. Several of the estimates differ from official government figures. The estimates are based on reported figures wherever possible, using approaches to improve the comparability of information from different sources. See the source for details on the origin of particular national estimates. Estimates and methodologies are reviewed regularly by WHO, UNICEF, UNFPA, academic institutions and other agencies and are revised where necessary, as part of the ongoing process of improving maternal mortality data. Because of changes in methods, prior estimates for 1995 levels may not be strictly comparable with these estimates.

#### INDICATORS OF EDUCATION

##### **Male and female gross primary enrolment ratios, male and female gross secondary enrolment ratios.** Source:

Spreadsheet provided by the UNESCO Institute for Statistics,

September 2006. Population data is based on: United Nations Population Division. 2005. *World Population Prospects: The 2004 Revision*. New York: United Nations. Gross enrolment ratios indicate the number of students enrolled in a level in the education system per 100 individuals in the appropriate age group. They do not correct for individuals who are older than the level-appropriate age due to late starts, interrupted schooling or grade repetition. Data are for the most recent year estimates available for the 1999-2006 period. Data for 2005 and 2006 are provisional.

**Male and female adult illiteracy.** Source: See gross enrolment ratios above for source; data adjusted to illiteracy from literacy. Illiteracy definitions are subject to variation in different countries; three widely accepted definitions are in use. Insofar as possible, data refer to the proportion who cannot, with understanding, both read and write a short simple statement on everyday life. Adult illiteracy (rates for persons above 15 years of age) reflects both recent levels of educational enrolment and past educational attainment. The above education indicators have been updated using estimates from: United Nations Population Division. 2005. *World Population Prospects: The 2004 Revision*. New York: United Nations. Data are for the most recent year estimates available for the 1995-2005 period.

##### **Proportion reaching grade 5 of primary education.**

Source: See gross enrolment ratios above for source. Data are most recent within the school years 1989-2005. Data for 2005 and 2006 are provisional.

#### INDICATORS OF REPRODUCTIVE HEALTH

**Births per 1,000 women aged 15-19.** Source: Spreadsheet provided by the United Nations Population Division. This is an indicator of the burden of fertility on young women. Since it is an annual level summed over all women in the age cohort, it does not reflect fully the level of fertility for women during their youth. Since it indicates the annual average number of births per woman per year, one could multiply it by five to approximate the number of births to 1,000 young women during their late teen years. The measure does not indicate the full dimensions of teen pregnancy as only live births are included in the numerator. Stillbirths and spontaneous or induced abortions are not reflected. Estimates are for the 2005-2010 period.

**Contraceptive prevalence.** Source: Spreadsheet provided by the United Nations Population Division. These data are

derived from sample survey reports and estimate the proportion of married women (including women in consensual unions) currently using, respectively, any method or modern methods of contraception. Modern or clinic and supply methods include male and female sterilization, IUD, the pill, injectables, hormonal implants, condoms and female barrier methods. These numbers are roughly but not completely comparable across countries due to variation in the timing of the surveys and in the details of the questions. All country and regional data refer to women aged 15-49. The most recent survey data available are cited, ranging from 1989-2005.

**HIV prevalence rate, M/F, 15-49.** Source: UNAIDS. 2006. "Estimated HIV Prevalence (%) among Men and Women (ages 15-49) in 2005." Spreadsheet. Geneva: UNAIDS. These data derive from surveillance system reports and model estimates. Data provided for men and women aged 15-49 are point estimates for each country. The reference year is 2005. Male-female differences reflect physiological and social vulnerability to the illness and are affected by age differences between sexual partners.

## DEMOGRAPHIC, SOCIAL AND ECONOMIC INDICATORS

**Total population 2007, projected population 2050, average annual population growth rate for 2005-2010.** Source: Spreadsheets provided by the United Nations Population Division. These indicators present the size, projected future size and current period annual growth of national populations.

**Per cent urban, urban growth rates.** Source: United Nations Population Division. 2006. *World Urbanization Prospects: The 2005 Revision*. CD-ROM Edition: Data in Digital Format. New York: United Nations. These indicators reflect the proportion of the national population living in urban areas and the growth rate in urban areas projected.

**Agricultural population per hectare of arable and permanent crop land.** Source: Data provided by Food and Agriculture Organization, Statistics Division, using population data based on the total populations from: United Nations Population Division. 2005. *World Population Prospects: The 2004 Revision*. New York: United Nations; and activity rates of economically active population from: ILO. 1996. *Economically Active Population, 1950-2010*, 4th Edition. Geneva: ILO. This indicator relates the size of the agricultural population to the land suitable for agricultural production. It is responsive to changes in both the structure of national economies (proportions of the workforce in agriculture) and in technologies for land development. High values can be related to stress on land productivity and to fragmentation of land holdings. However,

the measure is also sensitive to differing development levels and land use policies. Data refer to the year 2003.

**Total fertility rate (2007).** Source: Spreadsheet provided by the United Nations Population Division. The measure indicates the number of children a woman would have during her reproductive years if she bore children at the rate estimated for different age groups in the specified time period. Countries may reach the projected level at different points within the period.

**Births with skilled attendants.** Source: Spreadsheet provided by WHO with data from: Database on Skilled Attendant at Delivery. Geneva: WHO. Web site: [www.who.int/reproductive-health/global\\_monitoring/data.html](http://www.who.int/reproductive-health/global_monitoring/data.html). This indicator is based on national reports of the proportion of births attended by "skilled health personnel or skilled attendant: doctors (specialist or non-specialist) and/or persons with midwifery skills who can diagnose and manage obstetrical complications as well as normal deliveries". Data for more developed countries reflect their higher levels of skilled delivery attendance. Because of assumptions of full coverage, data (and coverage) deficits of marginalized populations and the impacts of chance and transport delays may not be fully reflected in official statistics. Data estimates are the most recent available from 1995 through 2005.

**Gross national income per capita.** Source: Most recent (2005) figures from: The World Bank. *World Development Indicators Online*. Web site: <http://devdata.worldbank.org/dataonline/> (by subscription). This indicator (formerly referred to as gross national product [GNP] per capita) measures the total output of goods and services for final use produced by residents and non-residents, regardless of allocation to domestic and foreign claims, in relation to the size of the population. As such, it is an indicator of the economic productivity of a nation. It differs from gross domestic product (GDP) by further adjusting for income received from abroad for labour and capital by residents, for similar payments to non-residents, and by incorporating various technical adjustments including those related to exchange rate changes over time. This measure also takes into account the differing purchasing power of currencies by including purchasing power parity (PPP) adjustments of "real GNP". Some PPP figures are based on regression models; others are extrapolated from the latest International Comparison Programme benchmark estimates. See original source for details.

**Central government expenditures on education and health.** Source: The World Bank. *World Development Indicators Online*. Web site: <http://devdata.worldbank.org/dataonline/> (by subscription). These indicators reflect the priority afforded to education and health sectors by a country through the government expenditures dedicated to them. They are not

sensitive to differences in allocations within sectors, e.g., primary education or health services in relation to other levels, which vary considerably. Direct comparability is complicated by the different administrative and budgetary responsibilities allocated to central governments in relation to local governments, and to the varying roles of the private and public sectors. Reported estimates are presented as shares of GDP per capita (for education) or total GDP (for health). Great caution is also advised about cross-country comparisons because of varying costs of inputs in different settings and sectors. Data are for the most recent year estimates available for the 1999-2005 period.

**External assistance for population.** Source: UNFPA. Forthcoming. *Financial Resource Flows for Population Activities in 2004*. New York: UNFPA. This figure provides the amount of external assistance expended in 2004 for population activities in each country. External funds are disbursed through multilateral and bilateral assistance agencies and by non-governmental organizations. Donor countries are indicated by their contributions being placed in parentheses. Regional totals include both country-level projects and regional activities (not otherwise reported in the table).

**Under-5 mortality.** Source: Spreadsheet provided by the United Nations Population Division. This indicator relates to the incidence of mortality to infants and young children. It reflects, therefore, the impact of diseases and other causes of death on infants, toddlers and young children. More standard demographic measures are infant mortality and mortality rates for 1 to 4 years of age, which reflect differing causes of and frequency of mortality in these ages. The measure is more sensitive than infant mortality to the burden of childhood diseases, including those preventable by improved nutrition and by immunization programmes. Under-5 mortality is here expressed as deaths to children under the age of 5 per 1,000 live births in a given year. Estimates are for the 2005-2010 period.

**Per capita energy consumption.** Source: The World Bank. *World Development Indicators Online*. Web site: <http://devdata.worldbank.org/dataonline/> (by subscription). This indicator reflects annual consumption of commercial primary energy (coal, lignite, petroleum, natural gas and hydro, nuclear and geothermal electricity) in kilograms of oil equivalent per capita. It reflects the level of industrial development, the structure of the economy and patterns of consumption. Changes over time can reflect changes in the level and balance of various economic activities and changes in the efficiency of energy use (including decreases or increases in wasteful consumption). Data estimates are for 2003.

**Access to improved drinking water sources.** WHO and UNICEF. 2006. *Meeting the MDG Drinking Water and*

*Sanitation Target: The Urban and Rural Challenge of the Decade*. Geneva: WHO. This indicator reports the percentage of the population with access to an *improved source* of drinking water providing an *adequate amount of safe water* located within a *convenient distance* from the user's dwelling. The italicized words use country-level definitions. The indicator is related to exposure to health risks, including those resulting from improper sanitation. Data are estimates for the year 2004.

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